

MANUFACTURERS' RECORD

A WEEKLY REVIEW OF THE IRON, STEEL, METAL & HARDWARE TRADES.

AND A MANUFACTURING AND TEXTILE PAPER, DEVOTED TO THE UPBUILDING OF SOUTHERN MANUFACTURES AND THE DEVELOPMENT OF THE MATERIAL RESOURCES OF THE SOUTH.

VOL. 8. No. 10.
WEEKLY.

BALTIMORE, OCTOBER 17, 1885.

\$3.00 PER ANNUM.
SINGLE COPIES, 10 CENTS.

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Flour Mill Machinery.

We make Rolls or Portable Mills for making New Process Corn Meal.
Complete outfits on any system Rolls or Stones for Wheat Grinding.

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With most approved Safety Devices.
Dumb-Waiters, Automatic Hatch-Doors, &c.



"ECLIPSE" ROCK DRILLS, "STRAIGHT LINE" AIR COMPRESSORS,

Machinery for Tunneling, Grading, Mining, Quarrying, etc.

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OVER 300,000 NOW IN USE. THE LIGHTEST, STRONGEST, BEST BALANCED and CHEAPEST in the WORLD.

Whole Pulleys from 9 inches to 120 inches diameter. Split Pulleys from 12 inches to 120 inches diameter. All widths of face up to 36 inches, crowning or straight, with single, double or triple sets of arms. Also Tight and Loose Pulleys. Absolute satisfaction guaranteed.

SHAFTING, HANGERS, COUPLINGS, &c.

MEDART PATENT PULLEY CO., 1206 TO 1214 N. MAIN STREET, ST. LOUIS, MO.
Stores: 99 to 101 W. Second St., Cincinnati. 24 & 26 S. Canal St., Chicago.

J. A. J. SHULTZ, President.

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SHULTZ BELTING COMPANY, ST. LOUIS, MO.

—Manufacturers of Shultz Patent Fulled Leather Belting, Lace and Picker Leather.—

OUR BELTING is made of Leather, tanned on the surfaces only; the interior (which is the fibre and strength of the hide) is not tanned, but Rawhide fulled and softened by our patent process. Our belting is more pliable, and hugs the pulley better and transmits more power than any other Belt. It does not pull out at the laceholes or rivets. It stretches less than any other Belt. It works equally well for the largest Driving Belts or for the fastest running machinery and smallest pulleys. OUR LACE LEATHER is made of Rawhide, by our patent process, without any tanning and is stronger and will wear better than any other. WE ALSO MAKE THE BEST PICKER LEATHER AND BELT GREASE IN THE COUNTRY. Satisfaction guaranteed.

Southern Agents—FRED. N. OGDEN, New Orleans, La. J. H. COFFIN & CO., Memphis, Tenn. J. L. LINDSAY, Richmond, Va.

WE ADVERTISE IN THIS ISSUE

The American Paper Pulley



DOUBLE ARM PULLEY.



Points.

Transmitting power enormously greater than any other material. Belts cannot slip within the safe strength of the belt itself. Tighteners never required. Weight less than half of iron. Exactly balanced. Slacker and narrower belts and smaller pulleys are practicable. Cannot shrink, check, warp swell or break. Impervious to oil or moisture, and never polish. Insensible to wear. Freights less. Prices competitive.



SINGLE ARM PULLEY.

Construction.

These Pulleys are made of Straw Board, cemented and compressed by hydraulic pressure, dowed with second growth hickory, turned inside and out on their own hub, sized with water-proofing and varnished inside. Draft of belt is on the edge of grain.

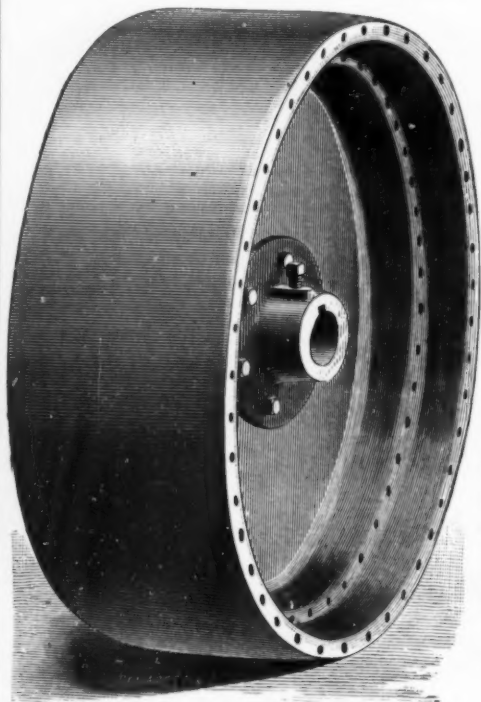
Tests.

FOLLOWING IS A SUMMARY IN ROUND NUMBERS:

Comparison of Weights,	24"x 6" Iron,	90 lbs.	Paper,	50 lbs.
	36"x 12" "	270 "	"	138 "
	40"x 10" "	240 "	"	111 "
Transmission, Iron 34 lbs., Paper 144 lbs., for equal tension.				
Tension, -	" 150 "	" 39 "	" "	transmission.
Width, - -	" 12 inch, "	" 3 inch (unsafe for belt.)		
Diameter, -	" 48 "	" 24 "		for equal tension.
Contact, -	90° on 24" paper	equals 180° on 36" iron.		



SINGLE BELT PULLEY.



DOUBLE PINNED PULLEY.

Give us a Trial Order for the worst place in your mill, and you will never use any other Pulley.

We are also Contractors for Full Mill Outfits of Shafting, Hangers, Couplings, &c., at Low Figures. Also Paper Friction Wheels and Friction Fillers of all sizes; and Paper Polishing Wheels.

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Send for Illustrated Price List with discounts.

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The Westinghouse Engine, the Reynolds-Corliss Engine, the Huyett & Smith Fans, Ventilators, &c.

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AMERICAN SUPPLY COMPANY,

Formerly Myron Fish & Co., of Valley Falls, R. I., and Kendrick Loom Harness Co., of Providence, R. I.

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Oak Belting, Lace and Picker Leather, and Dealers in Supplies for Cotton, Woolen and Silk Mills.

Agents for Joseph Noone's Sons'

Roller, Slasher & Clearing Cloths.

—Agents for—

RODDICK'S PATENT IMPROVED OIL CANS.

Calf, Sheep and Lamb Roller Skins, and Roll Covers' Tools.



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Unequalled Facilities for Furnishing
Shuttles & Heddle Frames,
WIRE HEDDLES & WIRE GOODS
Of all Descriptions.

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We Manufacture both Worsted and Cotton Machine-Knit Mail Harness for Weaving Fine Worsted and Silk Goods. Also a Full Line of Supplies for Jacquard Looms.

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THE WHITIN MACHINE WORKS,

J. LASSELL, President and Treasurer.

G. E. TAFT, Agent.

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—MANUFACTURERS OF—

COTTON MACHINERY

Openers, * Lappers, * Cards,

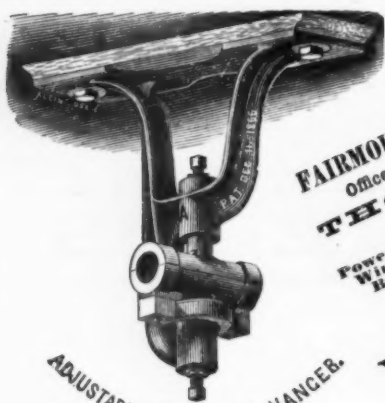
Railway Heads, Drawing,

RING SPINNING, SPOOLERS, WET and DRY TWISTERS,

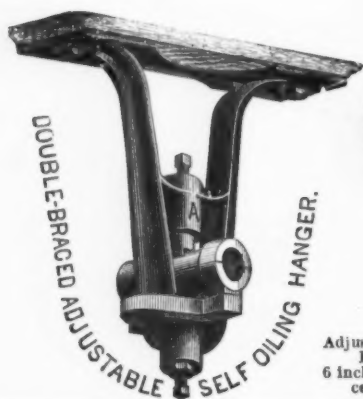
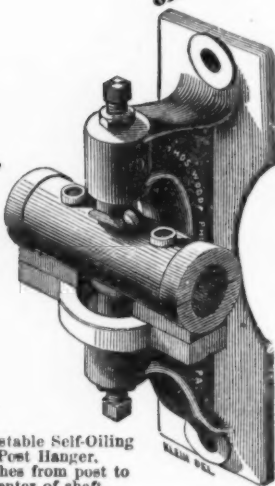
REELS,

WARPERS, * DRESSERS, * LOOMS, * & C.

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ADJUSTABLE SELF-OILING HANGER.

Ball and Socket
Self-Oiling Pillow Block.DOUBLE-BRACED ADJUSTABLE
SELF OILING HANGER.Adjustable Self-Oiling
Post Hanger.
6 inches from post to
center of shaft.Adjustable Self-Oiling
Post Hanger.
6 inches from post to
center of shaft.

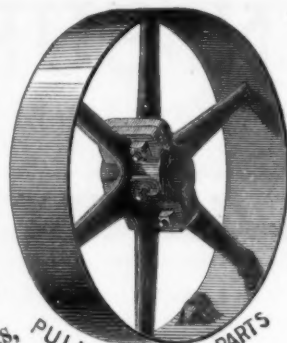
FAIRMOUNT MACHINE WORKS.
Office, 2106 Wood St., Philadelphia.
THOMAS WOOD,
Manufacture as Specialties
Power Looms, Patent Bobbin or Quill
Winding Machines, Plain and Presser
Beaming Machines, Dyeing, Reeling,
or Spooling Machines, Sizing,
Warp Spinning, Fulling and Cal-
endering Machines,
WARPING MILLS,
16, 18 and 20 yards Circumference,
WITH IMPROVED HECKS.

SHAFTING,
With Patent
ADJUSTABLE SELF-OILING HANGERS,
8, 10, 12, 13, 18, 20, 24 and 30 in. drop.
Also WALL, POST AND GIRDER HANGERS.
Pulleys, from 4 inches to 10 feet in diameter.
PATENT FRICTION PULLEY.
Pulleys in two parts, any size required.
PATENT HOISTING MACHINES.
Oil Presses for Lard, Fish and Paraffine.

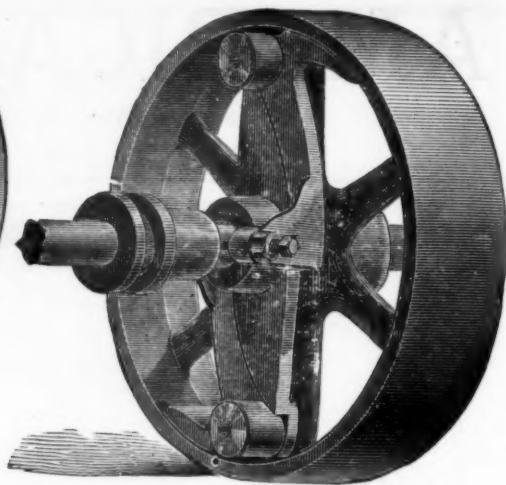
Special Driving,
such as Angular, Muley, and Galloway Driving,
furnished for any position
where possible to transmit power by belts.
PULLEYS from 4 inches to 10 feet in diameter.

Why use old style Bearings, that require oiling
every day, when you can get Bearings at less cost
that only require oiling once in Six Months, and
thus save oil and labor enough to pay for the bear-
ings in use. Test the matter for yourselves; a
trial always secures the trade.

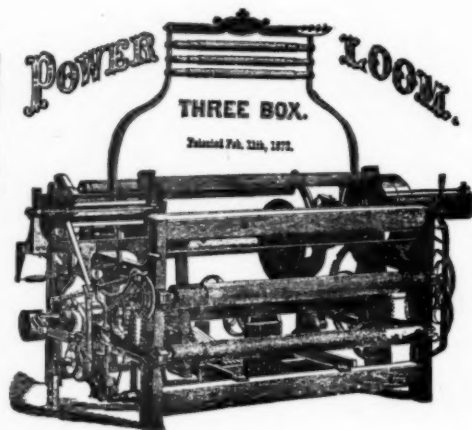
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PHILADELPHIA, PENNA., U. S. A.



PULLEY IN TWO PARTS



PATENT FRICTION PULLEY.
Simple, reliable and very durable.
Suitable for any kind of driving, they
serve equally well as driver or driven.

POWER LOOM.
THREE BOX.
Patented Feb. 22nd, 1875.

THE LAMB KNITTING MACHINE MANUFACTURING CO.

MANUFACTURERS OF

THE LAMB KNITTING MACHINES,

TUTTLE KNITTING MACHINE,

—AND—

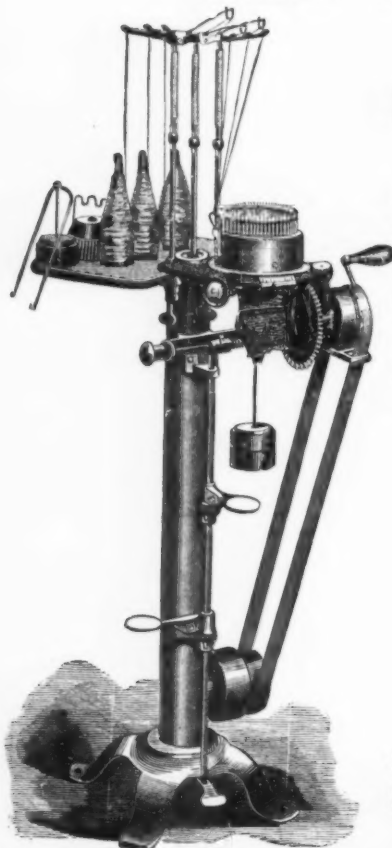
New AUTOMATIC CIRCULAR RIB KNITTING MACHINE

New Automatic Circular Rib Knitting Machine

For Knitting Ribbed Tops for Socks, Shirt Cuffs,
and Drawer Bottoms.

This machine will produce from twenty-five to thirty dozen pairs of Cuffs in ten hours, making the WELT and LOOSE COURSE AUTOMATICALLY. The Needle Cylinder and Dial are made of FORGED CAST STEEL, and everything about the machine is built in the most THOROUGH and WORKMANLIKE manner, with the view of having them run the longest possible time without repairs. They are complete within themselves. We make them any number of ribs desired.

**THE LAMB MACHINE
IS THE ONLY
MACHINE**



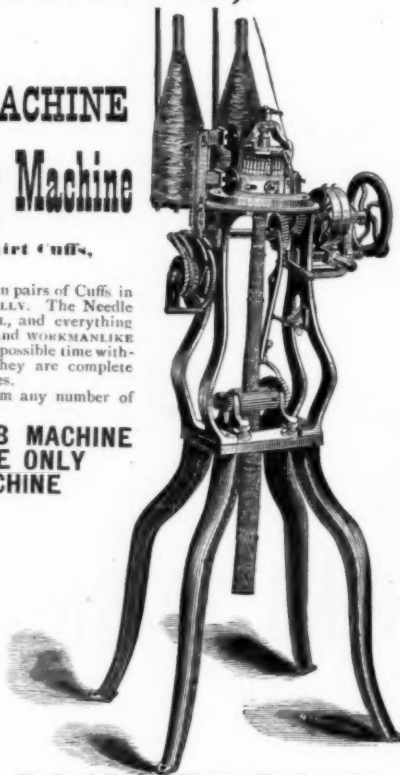
THE LAMB MACHINE.

Send for Full Particulars of
the Above Machines to



That knits hosiery or tubular work of all sizes.
That narrows and widens on hosiery or tubular work.
That knits a regular, right-angle heel, such as is knit by hand.
That narrows off the toe.
That knits a sock or stocking complete.
That knits mittens and gloves of any size without a seam.
That forms genuine Ribbed or Seamed work.
That knits the Double, Flat, or Fancy Webs.
That knits an elastic seam-stitch Suspender with button holes.
That knits the Afghan stitch, Cardigan Jacket stitch, Fancy Ribbed stitch, the Raised Plaid stitch, the Nubia stitch, Shell stitch, Unique stitch, Tidy stitch, &c., &c.

It is now the Standard Machine for manufacturing all lengths of needle beds, from 8 inches by 60 inches, and cuts from four needles to the inch to ten to the inch. More of these machines have been made and sold than all others combined.



The Lamb Knitting Machine Mfg. Co's New
CIRCULAR RIB KNITTING MACHINE,
For Knitting Ribbed Tops, for Socks, Shirt Cuffs
and Drawer Bottoms.

THE LAMB KNITTING MACHINE MANUFACTURING CO., CHICOPEE FALLS, MASS.

IN CORRESPONDING, PLEASE MENTION "THE MANUFACTURERS' RECORD."

HOWARD & BULLOUGH, & RILEY,

BUILDERS AND IMPORTERS OF

COTTON MACHINERY.

Wool, Worsted and Flax Machinery and English Card Clothing.
MILL ENGINEERS.

GREAT SUCCESS OF OUR

PATENT ELECTRIC STOP-MOTION,

ALREADY APPLIED TO OVER

10,000 DELIVERY HEADS OF DRAWING, AND

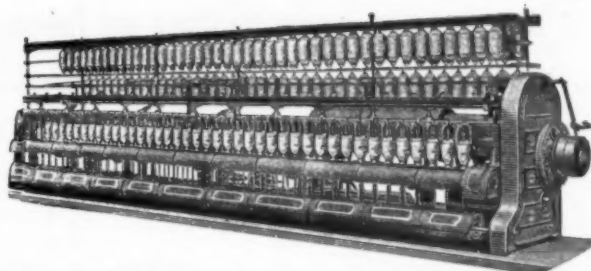
71,000 INTERMEDIATE ROVING SPINDLES.

The quality of Sliver produced by our Frames surpasses all others, and Waste, Single and Roller Laps are prevented, and production increased.

Correspondence Solicited.

Send for Circulars.

SLUBBING AND ROVING FRAMES WITH LATEST AND BEST IMPROVEMENTS.



ALSO, IMPORTERS OF

Hardened and Tempered Steel Wire a Specialty.

No. 19 PEARL STREET, BOSTON, MASS.

SPECIALTIES:

EXHAUST OPENERS, LAPPERS, (LORD'S EVENERS,) IMPROVED ROLLER CARDS, PRODUCE MORE AND MAKE LESS WASTE THAN ANY OTHER.

7,000 SELF-STOPPING WARPERS, Already working with latest improvements.

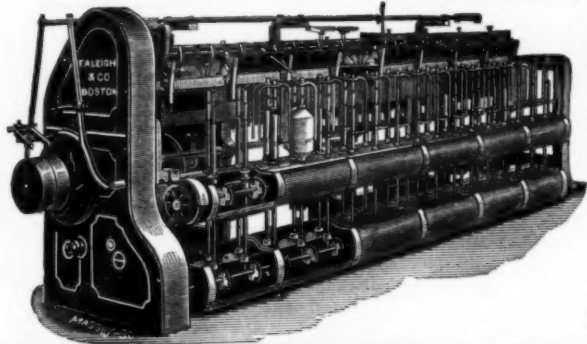
800 CYLINDER SLASHERS Now at work in America alone

Patent and plain Spindle, Spinning and Twisting Frames, Spoolers, Reels and Circular Warpers, Cloth Folders, Size Kettles, plain and Fancy Looms, Spindles, Flyers and Fluted Rolls.

F. A. LEIGH & CO.

Importers of Mill Machinery,

—No. 40 WATER STREET, BOSTON, MASS.—



Openers, * Lappers, * Cards, * Drawing,
Slubbing and Roving Frames,
CARD CLOTHING, ETC.

Correspondence Solicited.

Send for Circulars.



GANDY'S PATENT MACHINE BELTING

GOLD MEDAL AWARDED NEW ORLEANS, 1885, FOR BEST RUNNING BELTS.

Made PERFECTLY Straight and any Length without Joints.

For Main Driving it is the Best. Much Cheaper Than Leather.

MANUFACTURED BY

THE GANDY BELTING CO., BALTIMORE, MD.



THE "TRIUMPH" ROCK DRILL

and NORWALK AIR COMPRESSOR

Are the Latest and Most Improved Machines that were ever designed for the work required of them. They are the Most Simple, Economical and Effective now known, and will satisfy all Purchasers.

Boilers, Steam Pumps, Hoisting Engines, Pipe and Fittings, Electric

Blasting Apparatus, Powder, Caps and Fuse, Steam and Air Hose, Wire Rope,

—And General Mining and Contractors' Supplies.—

Complete Specifications for Rock Drilling and Mining Plants Furnished on Application.

SERGEANT DRILL CO., 16 Dey Street, New York, U. S. A.

WHITINSVILLE SPINNING RING CO.

WHITINSVILLE, MASS., U. S. A.

SUPERIOR WORKMANSHIP.

NOT EXCELLED IN DURABILITY.

EVERY RING WARRANTED.

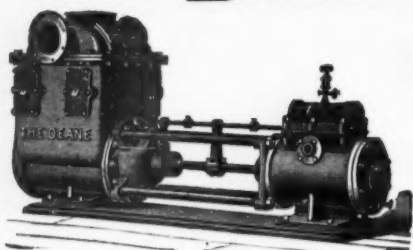


The Simplest and Best Method of Adjusting Rings.

SEND FOR SAMPLE AND PRICE-LIST.

THE DEANE STEAM PUMP CO., HOLYOKE, MASS.

MANUFACTURE



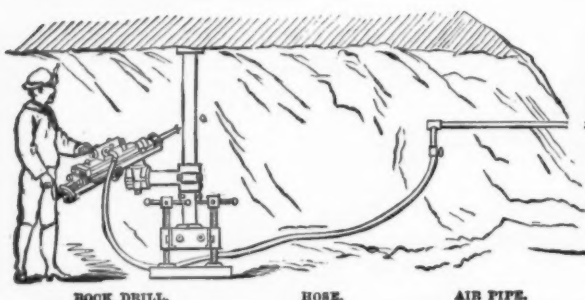
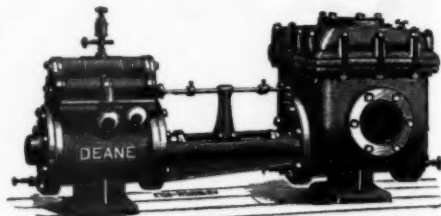
Every variety of Pumping Machinery

VACUUM PUMPS FOR SUGAR WORK, ETC.

IRRIGATION PUMPS ARE SPECIALTIES.

Water Works Pumping Engines for Cities and Towns.

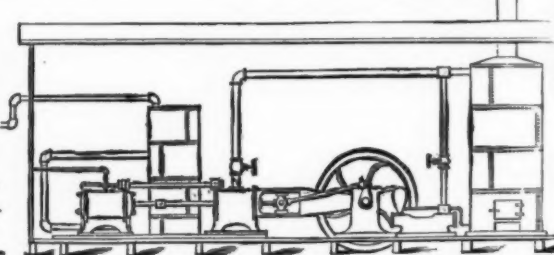
SEND FOR NEW ILLUSTRATED CATALOGUE No. 22.



ROCK DRILL.

HOSE.

AIR PIPE.



AIR RECEIVER.

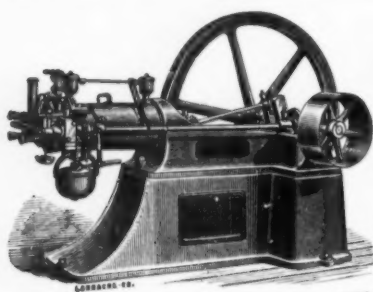
AIR COMPRESSOR.

FEED PUMP. BOILER.

RAND DRILL CO.

23 Park Place, NEW YORK.

Rock Drills,
Air Compressors, and
General Mining Machinery,
Blackrock Blasting Powder,
Blasting Batteries and Fuse.



Over 14,000 in Use.

Otto Gas Engine

20 to 70 per ct. less Gas consumption than ANY other ENGINE.

Working Without Boiler, Steam, Coal, Ashes or Attendance.

Started instantly by a Match, it gives full power immediately. When stopped, all expense ceases.

No explosions, no fires nor cinders, no gauges, no pumps, no engineer or other attendant while running. Recommended by insurance companies. UNRIVALLED IN EVERY RESPECT for hoisting in warehouses, printing, ventilating, running small shops, &c. Sizes: 1 to 25-horse power.

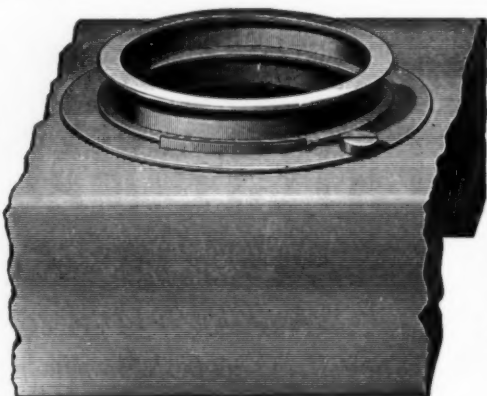
Branch Office, 214 Randolph St., Chicago.

SCHLEICHER, SCHUMM & CO., N. E. cor. 33d and Walnut Sts., Philadelphia.

DOUBLE ADJUSTABLE Spinning Rings.

GEORGE DRAPER & SONS,
HOPEDALE, MASS.

TELEGRAPH ADDRESS AND RAILROAD STATION,
MILFORD, MASS.



	Number of Rings sold.	Number of Rings sold for repairs.
1869.....	6,025.....	
1870.....	20,258.....	
1871.....	38,648.....	
1872.....	94,264.....	12
1873.....	117,301.....	
1874.....	168,382.....	500
1875.....	223,924.....	963
1876.....	185,319.....	947
1877.....	270,812.....	946
1878.....	215,214.....	3,309
1879.....	336,918.....	8,007
1880.....	567,860.....	11,264
1881.....	659,730.....	8,974
1882.....	636,715.....	22,515
1883.....	416,500.....	21,689
1884.....	319,869.....	25,105
1885, 5 mos.	112,522.....	12,118
Total number sold in 16 years.....	4,390,260.....	116,349
Total number in use 4,273,911.		

The great durability of our Rings is shown by the fact that we have more rings in use over twelve years old than all we have sold for repairs.

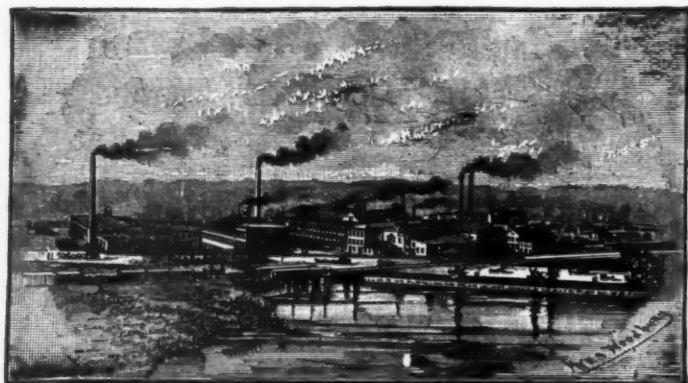
This statement shows unmistakably that a mill once supplied with our rings need think but little of the cost of repairs. As the number sold for repairs is an average of about twenty per cent. of the number sold the tenth year before, the average life of our rings will be at least twelve years.

Do not make the mistake of ordering new frames without specifying Double and Adjustable Rings. While they cost more to begin with, they are much the cheapest in the end, on account of their uniform excellent quality and unparalleled durability.

As an encouragement to use none but the best of Rings, we have decided to reduce the price on and after the first day of January, 1885, of those 1 3/4 inches or less in diameter, without holders and screws, to be used only to take the place of our rings worn out, to 12 cents each.

Washburn & Moen Manufacturing Co., Worcester, Mass.

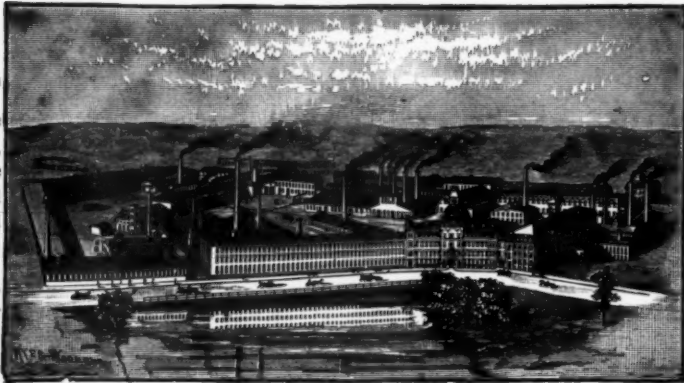
Wire Drawers, and Manufacturers of Iron and Steel Wire of Every Description.



Iron and Steel Telegraph and Telephone Wire.

Patent Steel Wire Bale Ties, Pump Chains, Chain Wire, Steel Wire for Springs, Needles and Drills, Watch Main Springs.

Send for Price-Lists, Circulars and Descriptive Pamphlets on Our Specialties.



NEW YORK WAREHOUSE:

21 Cliff Street,

New York City.

GLIDDEN PATENT

STEEL BARB WIRE.

CHICAGO WAREHOUSE:

107 Lake Street,

Chicago, Illinois.

The Best Fence Material in Use.

For Sale by Special Agents and Hardware

Proof against Fire, Wind and Flood.

Dealers in all Parts of the United States.

Published Every Saturday by

BIGSBY & EDMONDS.

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R. H. EDMONDS, EDITOR.

—OFFICE,—

71 and 73 Exchange Place, Cor. Commerce St.

-BALTIMORE.—

NEW YORK BRANCH OFFICE:

Room 8, No. 118 Fulton Street.

J. W. BIGSBY, Resident Partner.

—SOUTHERN OFFICE, ATLANTA, GA.—

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Advertising Agent for New York and Vicinity.

Room 14, 29 Park Row, New York.

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TO UNITED STATES AND CANADA, \$3.00

OTHER COUNTRIES, - - - 4.50

ADVERTISING RATES:

One square (14 lines Agate, 1 inch) 1 time.. ...\$ 1.50

00	00	00	00	00	4	00	5.00
00	00	00	00	00	3	00	10.00

24	44	24	22	23	6	25	18.00
24	22	24	24	22				

For advertising on outside pages add 50 per cent. to

the above rates.
Reading Notices 50 cents per line each insertion.

BALTIMORE, OCTOBER 17, 1885.

CORRESPONDENCE relating to the manufacturing, mining, lumbering and all other material interests of the Southern States is solicited. Reaching so many capitalists in all parts of the United States seeking profitable investment in the South, the **MANUFACTURERS' RECORD** offers an excellent chance for the people in that section to place the advantages of each locality before those likely to be interested. We will take great pleasure at all times in telling what has already been accomplished in the South, and showing up the opportunities of doing still more.

OF Rabun county, Ga., it is said that: "Thousands of bushels of fine apples are now rotting on the ground for want of a market, more than even the hogs can destroy; they have bins of rye and corn, and all manner of mountain produce for sale, but cannot afford to haul it over the mountains. Every week new veins of asbestos, mica and other minerals are discovered, but this hidden wealth cannot be utilized for the want of transportation. Rabun, while a mountainous county, boasts vast tracts of alluvial valleys, her hill-sides grow apples to great perfection, and even the ridges yield tobacco up to their peaks. It only lacks the developing touch of a railroad to lay this vast trade into the commercial lap of Georgia."

Rabun county may have magnificent resources that only need transportation facilities to develop them, but it will be a long time before capitalists will invest money in building railroads in that State, unless the Georgia railroad laws are modified.

IT does look as if the Carolina Central intended to go to Rutherfordton and perhaps to Cranberry.—Carolina Spartan.

We are authorized to say that the Carolina Central will positively be extended to Rutherfordton, the work having already been commenced. When it will be continued on to Cranberry we cannot say.

The Railway Age presents a statement regarding future railroad building that is very encouraging. It gives the following summary of the amount of railroad work in progress and the mileage of railroads proposed.

States.	In progress		Proposed.		Total.	
	No. r'ds	Miles	No. r'ds	Miles	No. r'ds	Miles
New Eng'd.....	7	202	16	611	23	813
Middle.....	33	688	60	1,645	93	2,333
Southern.....	56	3,193	122	7,231	178	9,424
Western.....	92	5,077	190	22,619	282	27,696
Pacific.....	19	1,088	31	3,549	50	4,637
Grand totals.....	207	9,248	410	35,445	606	44,393


While it is not of course supposed that any large proportion of the roads coming under the head of "proposed" lines will be built, at least within the next twelve or fifteen months, yet, at least a part of them will doubtless be put under construction within that time. Of the 9,248 miles reported as in progress, 2,000 miles have already been built, leaving over 7,000 miles of road practically under construction. These figures are certainly indicative of a much larger mileage of new roads during 1886 than we have had for several years and are very encouraging for all branches of trade connected with railroad building.

THE legislature of Georgia, by its failure to pass the bill modifying the powers of the railroad commission, has warned capitalists not to invest their money in any railroad enterprise in that State. It is strange, indeed, that so many members of the Georgia legislature should be so lost to all sense of justice and right, as to seek to confiscate the property of others. The \$70,000,000 invested in railroads in that State are virtually under the sole control of an irresponsible commission, having no interest whatever in this vast property. The owners of these roads, that have been instrumental in developing the resources of Georgia, have no control over their own property. It is a monstrous work of injustice and dishonesty, and is a disgrace to any State that will enact such laws. It is to be hoped that an appeal will now be made to the people direct, and we believe that their decision will be on the side of right. If they, too, should decide that railroads have no rights in Georgia (though we feel sure they will not) then indeed will Georgia cease to attract the favorable attention of capitalists, and it will be folly to look for any further railroad building in that State.

THE Whitney Arms Company, of New Haven, Conn., and other large manufacturers are organizing a syndicate for the opening of a large warehouse in the City of Mexico where the goods manufactured by the members of this syndicate shall be kept for sale. This is an excellent move, and it ought to be productive of much good by opening up a fine field for the extension of our trade with Mexico.

A New York business man, whose acquaintance we have never had the pleasure of making, but whom we know to be closely interested in matters pertaining to the development of the South, and to the investment of capital in that section, sends us the following comments upon the evil effects of some Southern legislation which the MANUFACTURERS' RECORD has been so persistently fighting:

Three articles of your issue of the 10th have my special attention, viz.: "War Against Railroads," (in connection with "The Georgia Railroad Commission,") "Driving Capital From the South," and the remarks upon "Dixie." Of the first two, they should be read with a glance at your articles on "Money Needed for Banking," August 15th, 22d and 29th, and with remembrance of the late decision of the Attorney General of New York State—"that the savings banks of New York may not lawfully invest their deposits in the bonds of the State of Georgia,"—because that State has within ten years made default in payment of its lawful obligations. In regard to the legislation of most of the Southern coast States, it is important to remember that there is ever in those States a conflict between "up country" and "low country," between agriculture and commerce, and that the country people are jealous of the large cities; that naturally the first mentioned have not the knowledge and experience of the world at large, and of the demands and rewards of trade that their brethren have who see and feel of necessity, the flow and ebb of that circulation which is a State's or a country's life. The commercial and manufacturing cities, especially those on the seaboard, stand on the arteries and learn the philosophy of the State's life. Moreover, and it may be said simply as a fact of general experience, and certainly one of greater emphasis in the South, education, reading, broad interests and wide exchange of thought, are less in the country interior than in the great cities. For these reasons and others, the country—the agricultural—representation in legislation, greatly outnumbering that representation of broader knowledge and wider experience, which is cosmopolitan, has the victory which destroys. The selfish, unbusiness-like, suicidal, short-sighted, provincial—yes, dishonest policy, which has done, and is doing, everything it can to cripple the development in Southern resources, is amazing, and it is also ridiculous—as amazing and ridiculous as you show it to be in the last half of your editorial "War Against Railroads." The business men—the capitalists here—understand all this. Until the South can see further and act fairer, she will keep her "boom" to herself, and very small. The flies only laugh and attend to their own business now when they hear the seductive song of the spider. And this brings me to "Dixie," the Southern magazine. What a time and opportunity to nobly occupy a splendid field; to have followed literature instead of advertising. Beginning with such performances as "Randall," to new words and music, composed in the "Dixie" office, and "A Negro Camp Meeting," it cannot long hold a large audience without discredit to Southern taste. Your journal is, in my judgment, an excellent enterprise, admirably conducted. I am sufficiently interested in it to venture on these remarks in my business hours.

 If you are not already a subscriber to the BALTIMORE MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year, or six months for \$1.50.

THE New York World says: Evidences of a better condition of affairs in trade throughout the country continue to multiply. The traffic of the leading railways—always an excellent barometer of business—shows steady improvement, and on many lines every wheel is in motion. A large number of interior merchants, only recently in this city buying goods, have returned home and orders to replenish stocks are already coming, which plainly indicates that internal trade is increasing in volume.

In one section the cotton crop promises to be the largest on record, and in another the same may be said of the corn crop. These are the two most important products of the country, and with such an abundant yield it is not surprising that confidence as to the future is expressed throughout mercantile circles. In certain branches of industry which have long been depressed improvement is making progress, noticeably in the coal trade and in the manufacture of steel rails. Wall street has caught the infection, and while special causes have to a certain extent stimulated the buoyancy and activity, the general revival of business has undoubtedly had much to do with the advance that has taken place.

MR. JAY GOULD made some very sensible remarks in St. Louis the other day, when in an interview he deprecated labor strikes on railroads, and did not believe there would ever be any if both sides could fully realize the intimate relations they hold to each other. He expressed a strong desire that the employees on his road should purchase homes for themselves along the line, and would be very glad to know that every employee of the Missouri Pacific was the owner of some stock of the company. This would give them all a personal interest in the property, and every man would do his best to increase its earning power. There would then be no labor problem to solve.

Mr. Gould expressed decided opposition to a confederation of railroads, and said the proposition was absurd. What we want in this country, he said, is just what we have got,—sharp competition, but the competition should be confined to soliciting business on an agreed basis of traffic tariffs. He was also opposed to national legislature for railroads, believing that the Government would utterly fail if it undertook to do what competition and common business sense alone can accomplish.

THE earnings of the South Carolina railroads for August, 1885, were \$400,902.31, against \$361,117.41 for the corresponding month of last year, showing an increase of 11.02 per cent. At the present time the earnings of the roads are even more favorable, as compared with last year, than during August.

THE SOUTH'S INDUSTRIAL GROWTH.

WHAT HAS BEEN DONE IN NINE MONTHS.

A Wide Diversity of New Industries.

The industrial growth of the South is a subject of almost universal discussion. In Europe and America alike it is attracting great attention. It is already working great changes in many directions in established business interests, and its influence in the future is almost beyond calculation. There can be no measure or limit set to the possibilities of the South in the development of its industrial interests. A stupendous change in the material affairs of the South has already commenced. What its influence upon the business interests of the whole country will be within ten years is beyond calculation. Ten years ago a prediction that in 1885 the South would hold its present position in the estimation of the commercial world, and that in ten years such wonderful progress would be made in the development of the agricultural, manufacturing, mining and railroad interests of the Southern States as has been done, would have been regarded as the visionary talk of an enthusiast. Nearly half of the ten years passed without much sign of the coming events that, in this case at least, cast but a faint shadow before them. In 1879, however, it was seen that a great change had commenced, but its importance and its destined far-reaching influence was hardly appreciated.

Since 1879 the South has added 11,000 miles to her railroad mileage, the building of which, added to the investments in old roads and their improvement, must foot up but little, if any, short of \$500,000,000. The assessed value of property in the South, notwithstanding the fact that the assessments are much less than the actual cash value of property, and that a large amount of manufacturing property that has been created since 1879 is not represented in the tax assessments, owing to exemption laws, shows an increase of \$900,000,000 since 1879. The production of corn has increased from 334,000,000 bushels in 1879 to 498,000,000 bushels in 1885—a gain of 165,000,000 bushels—and of oats, from 42,000,000 bushels to about 70,000,000 bushels, while of tobacco, fruits and vegetables, the grasses, &c., the increase has been equally as satisfactory. In the raising of hogs and live stock generally the same wonderful progress has been shown.

In manufacturing, we have seen the number of cotton mills increase from 180 to 353, and the number of spindles and looms from 713,989 and 15,222, respectively, to 1,460,697 and 27,004—a gain of about 100 per cent. Cotton-seed-oil mills that in 1880 numbered 40, with a capital of \$3,504,500, now number 146, and their capital is \$10,792,450. In 1880 the South made 397,301 tons of pig iron; in 1884 it made 657,599 tons—a gain of 260,298 tons. Three States—Virginia, Alabama and Tennessee—that in 1880 produced 178,006 tons of pig iron, in 1884 produced 481,744 tons—an increase of 303,738 tons, or 9,500 tons more than the net increase in the United States, the production in the whole country outside of these three States being less in 1884 than in 1880. In 1880, 6,048,571 tons of coal were mined in the South, and in 1884 the output was 10,844,051 tons. The amount of phosphate rock mined in South Carolina in 1880 was 190,000 tons and the capital invested in the business was \$3,493,300, while now the capital is over \$6,500,000 and the amount of rock mined largely over 400,000 tons.

These are simply a few facts that we have thrown in to emphasize the industrial development of the South. It is not in these lines alone, however, that remarkable progress has been made. In the list

of new enterprises organized or established in the South during the first nine months of 1885, as published in the MANUFACTURERS' RECORD, there will be found furnace companies to make pig iron, foundries and machine shops, steel works, cotton seed oil mills, cotton compresses, fruit canning factories, carriage and wagon factories, agricultural implement factories, flour mills, grist mills, saw mills, planing mills, sash, door and blind factories, shuttle factories, tobacco factories, brick yards, ice factories, fertilizer factories, furniture factories, stove foundries, wire fence factories, lime works, soap factories, tanneries, glass works, gas works, whiting factories, distilleries, potteries, marble and slate quarrying companies, and companies to mine coal, iron ore, gold, silver, mica, natural gas, oil, &c., and many others, showing that the South's progress is a steady advance in all lines, and not an unhealthy, because overstimulated, growth of any one industry.

In the compilation of statistics upon the important matter of the South's development, we fully appreciate the importance of the most searching investigation and the utmost attainable accuracy. Neither work nor money is spared in the preparation of our reports upon this subject, the list of new enterprises and the statistics regarding the same for the first nine months of 1885 having been compiled and revised through the use of over 4,500 letters and postal cards sent directly from this office. From the returns received in answer to these letters we have compiled the statistics presented to-day. Basing our calculations upon these returns, received directly by the MANUFACTURERS' RECORD, and in the case of incorporated companies, comparing them with the official reports of the State officers, we are able to say that during the first nine months of 1885 the amount of capital, including capital stock of incorporated companies, represented by the new manufacturing and mining enterprises at the South, and in the enlargement of old plants and rebuilding of mills after being destroyed by fire, aggregates about \$52,386,000. It is, of course, true that with some of these companies the actual cash investment is not so large as the amount of their capital stock; but there are hundreds of small manufacturing enterprises, portable saw mills, small grist mills, gineries and similar small industries, costing from a few hundred to a thousand dollars, that are not included in this list. The aggregate cost of these would be very considerable, and would partly help to offset the too great capitalization of some incorporated companies. In addition to this, every manufacturing enterprise is constantly adding here and there a new piece of machinery, which in the aggregate is very great, but we take no account of that, only including cases where a mill is greatly enlarged, remodeled or other extensive improvements made.

Summing up the amount of capital and capital stock represented by our list of new enterprises for the first nine months of 1885, we have:

Alabama.....	\$ 5,864,000
Arkansas.....	500,000
Florida.....	1,237,000
Georgia.....	2,052,000
Kentucky.....	14,005,000
Louisiana.....	1,955,000
Maryland.....	6,107,800
Mississippi.....	571,500
North Carolina.....	2,543,000
South Carolina.....	592,000
Tennessee.....	2,300,000
Texas.....	2,280,000
Virginia.....	2,735,000
West Virginia.....	9,644,000
Total.....	\$52,386,300

On July 18 we published a list of all the new enterprises organized during the first six months of the year, and hence it is not necessary to name them again. Among the most extensive enterprises reported during the last three months were the following:

Alabama.—The Penn-Mobile Coal Co., capital stock \$250,000; Wharton Mills Co., \$40,000; a \$60,000 cotton-seed-oil mill; a \$500,000 land and improvement company to develop the manufacturing interests of Calera; \$25,000 enlargement of the Birmingham Rolling Mills; a \$125,000 iron company; a new furnace at Wheeling; \$10,000 chain works; \$10,000 sash and door factory at Sheffield; machine shop and foundry at the same place, and a number of saw mills, planing mills, &c.

Florida.—A \$500,000 company, composed of Northern capitalists, to build saw mills; an ice factory at St. Augustine and one at Tampa; machine shops at Kissimmee and Tavares, and quite a number of large saw mills.

Georgia.—The Coweta Fertilizer Co., capital stock \$25,000, now building a fertilizer factory; the Gorrie Ice Manufacturing Co. at Savannah, \$20,000; a \$20,000 plow and wagon factory at East Point; the Americus Cotton Seed Oil Co., \$25,000; a \$10,000 cotton-seed-oil mill at Winter-ville, and a \$20,000 mill at Waynesboro; \$20,000 put into new machinery by a cotton factory; two cotton compresses, and barrel factories, quarries, mines, gas works, grist and saw mills, &c.

Kentucky.—As in all our previous reports, Kentucky takes the lead in the amount of capital and capital stock. In this State, as in West Virginia, a large number of heavily capitalized companies are constantly being incorporated, and in this way the high rank of these two States, as compared with the other Southern States, is maintained. In both of them, however, there is very great activity in industrial enterprises, especially in mining operations. Among the most extensive enterprises in Kentucky for the three months were a \$500,000 tobacco manufacturing company at Louisville, a \$300,000 company to manufacture cable railway machinery, a \$100,000 gas machine manufacturing company, \$50,000 plow factory company at Louisville, a \$500,000 mining company, a \$300,000 smelter and furnace company, a \$50,000 coal mining company, \$50,000 axe and hatchet factory, \$50,000 milling company, a \$25,000 furniture factory, &c.

Louisiana.—A \$40,000 rice mill, \$12,000 ice factory and a \$9,000 ice factory, \$25,000 soap factory, \$50,000 oil manufacturing company, a cotton compress, \$65,000 cold storage and rice factory company, a \$100,000 ice manufacturing company, a \$5,000 fruit canning factory.

Maryland.—A \$50,000 copper mining company, \$200,000 mining company, \$250,000 bottling works, \$250,000 electric light company, a \$60,000 to \$70,000 enlargement of tobacco factory, a \$30,000 coal mining company, \$50,000 pulverizer works, &c.

In the other States there were, in Tennessee, a \$50,000 cracker manufacturing company, rebuilding of \$40,000 woolen mill and \$35,000 flour mill, a \$50,000 iron company, \$60,000 electric light company, \$10,000 oil factory; in Texas, a \$50,000 lumber company, \$50,000 cotton compress company, \$25,000 soap factory, \$25,000 flour mill, \$100,000 flour milling company, \$30,000 flour mill, \$10,000 mining company and a \$10,000 canning company; in Virginia, a \$7,500 flour mill, \$15,000 tobacco factory, two \$50,000 electric light companies, a carriage factory, granite quarries; and in West Virginia, \$75,000 coal mining company, \$35,000 coal mining company, \$500,000 heat and power company, a \$50,000 and two \$100,000 coal mining companies, a \$100,000 lumber company, \$12,000 roofing manufacturing company, &c.

In the following list we give the name, location and character of business of the new enterprises organized during the last three months, and existing establishments rebuilt or enlarged, etc.:

LOCATION.	NAME.	BUSINESS.
Andalusia.....	Deens & Mitchell.....	Saw Mill.
Birmingham.....	Birmingham Chain Factory.....	Chain Factory.
Birmingham.....	Birmingham Rolling Mills.....	Enlarged Mills.
Birmingham.....	Wharton Company Mills.....	Flour Mill.
Boykin.....	J. N. Purvis & Co. B. Frierson.....	Saw Mill.
Brewton.....	Harold Bro. & Scott.....	Saw Mill.
Calera.....	Large & Francis.....	Foundry & Machine Shop
Calera.....	Calera Land Co.....	Manufacturing &c.
Calera.....	J. H. Duran.....	Brick Yard.
Calera.....	John Hardy.....	Stave Factory & Saw Mill.
Calera.....	Connor & Co.....	Saw Mill.
Cedar Bluff (nr.) Wm. Cobin.....		Flour Mill.
Childersburg.....	J. W. & J. A. Edwards.....	Saw and Planing Mill.
Cross Plains.....	R. P. Morgan.....	Saw and Planing Mill.
Eutaw.....	T. J. Anderson.....	Grist Mill.
Gadsden.....	Gadsden Iron Co.....	Iron, Steel, &c.
Georgiana (nr.) Eli Thuston.....		Saw and Planing Mill.
Hanceville.....	D. B. Sapp & A. Griffith.....	Mill and Gin.
Hayneville.....	John P. Streety & Co.....	Mill.
Huntsville.....	Scruggs, Landman & Co.....	Cotton Compress.
Jenifer.....	Clifton Iron Co.....	Increased Capital.
Jonesboro.....	Hall & Massey.....	Grist Mill.
Lowrys.....	Deen & Mitchell.....	Saw Mill.
Mitchell Stat'n.....	Belser & Parker.....	Cotton Seed Oil Mill.
Mobile.....	Geo. W. Richardson.....	Boiler Factory.
Mobile.....	Penn-Mobile Coal Co.....	Coal Mining.
Mobile.....	E. R. Upham.....	Saw Mill.
Monroeville.....	T. J. Emmons.....	Grist and Saw Mill.
Montgomery.....	Union Warehouse & Elevator Co.....	Cotton Pickery, Grain Elevator, &c.
Montgomery.....	Montgomery Elevator Co.....	Grain Elevator.
Montgomery.....	Standard Gin & Machine Co.....	Planing Mill.
Montgomery.....	Montgomery Paper Box Fac. Box Factory.	
Mooresville.....	W. N. Hayes.....	Grist Mill, &c.
Morgansville.....	John Hunt.....	Mill.
Pine Level.....	McNeil Tally & Wadsworth.....	Saw and Grist Mill.
Pushmataha.....		Mill.
Red Level.....	Gantt, Barrow & Lambert.....	Saw Mill.
Selma.....	Brooks, Tyler & Barker.....	Foundry.
Selma.....	Selma Broom Factory.....	Broom Factory.
Sheffield.....	Sheffield Iron Works.....	Machine Shop & Foundry.
Sheffield.....	Iron City Brick Co.....	Brick Works.
Sheffield.....	Sheffield Manufacturing Co.....	Sash and Door Factory.
Stevenson.....	Wilson Milling & Lumber Co.....	Saw Mill.
Talladega.....	Smith & Sims.....	Paint Factory.
Tensaw.....	D. W. Holland.....	Saw Mill.
Tuscaloosa.....	Minhinett & Withers.....	Foundry.
Wheeling.....	Woodward Iron Co.....	New Iron Furnace.

ARKANSAS.

Altheimer.....	J. C. Bogy & Son.....	Grist Mill.
Arkansas.....	White River Lumber Co.....	Lumber.
Batesville.....	Pillow Litho'phic Stone Co.....	Litho'phic Stone Quarry.

LOCATION.	NAME.	BUSINESS.
Batesville.....	Batesville Mining Co.....	Mining.
Bear.....	Riverton Mining Co.....	Enlarged Gold Mining.
Morrilton.....	Dean & Son.....	Enlarged Planing Mill.
Newport.....	Morrison Decker & Co.....	Saw and Stave Mill.

FLORIDA.

Apalachicola.....	Apalachicola Lumber Co.....	Saw Mill, &c.
Bagdad.....	Wm. Davidson.....	Grist Mill.
Brooksville.....	Tucker & Bailey.....	Saw Mill.
Callahan.....	Dyal & Upton.....	Saw Mill.
Cedar Keys.....	L. W. Hamlin.....	Fence Factory.
Cotton Plant.....	Roach & Davis.....	Saw Mill.
Crystal River.....	Crystal River Lumber Co.....	Saw Mill.
Gadsden Co.....	John T. Howard.....	Mill and Gin.
Garden City.....	T. J. Edwards.....	Saw and Grist Mill.
Garden City.....	Blakely.....	Saw Mill.
Glendale.....	G. Gordy.....	Saw Mill.
Green Cove.....	Green Cove Springs Box & Basket Co.....	Box Factory.
Highland.....	Whipple & Edmunds.....	Grist Mill.
Kissimmee.....	W. H. Macy.....	Machine Shop.
Kissimmee.....	Kissimmee Mfg. Co.....	Brick Yard, &c.
Lake de Funiak.....	J. D. Gray.....	Saw Mill.
Lake de Funiak.....	C. H. Dixon.....	Sash and Door Factory.
Longwood.....	W. H. Barlow & Co.....	Moss Factory.
Milton.....	J. A. Chaffin & Co.....	Saw Mill.
Orlando.....	Orlando Lumber Co.....	Planing Mill, &c.
Orlando.....	Orlando Ice Mfg. Co.....	Ice Factory.
Orlando.....	Orlando Gas & Electric Light Co.....	Gas or Electric Lights.
Palatka.....	Jacksonville, Tampa & Key West Railroad.....	Machine Shops.
Sanford.....	F. J. Fox.....	Iron Works.
Sanford.....	Fla. Land & Colonization Co.....	Saw Mill.
Sanford.....	Weiskoff.....	Brick Yard.
Sanford.....	Home Fertilizer Co.....	Fertilizer Factory.
Silver Springs.....	Silver Springs Park Land Co.....	Saw Mill, &c.
Sligh.....	Co.....	Saw Mill.
St. Augustine.....	E. F. Joyce.....	Ice Factory.
Tampa.....	Russell H. Nevins.....	Ice Factory.
Tavares.....	Burleigh & Gardner.....	Machine Shop.
Waldo.....	D. Hicks.....	Carriage Factory.

GEORGIA.

Americus.....	Americus Cot. Seed Oil Co.....	Cotton Seed Oil Mill.
Albany.....	Geo. F. Montgomery.....	Planing Mill.
Albany.....	Campbell Cot. Compress Co.....	Cotton Compress.
Athens.....	Gardner & Childers.....	Planing Mill.
Atlanta.....	Geo. W. Scott & Co.....	Enlarged Fertilizer Works.
Atlanta.....	J. S. Morris.....	Brick Yard.
Atlanta.....	A. P. Eskridge.....	Broom Factory.
Atlanta.....	Atlanta Bridge & Iron Wks.....	Reopened Bridge Works.
Brunswick.....	W. A. Jeter, Hawkinsville.....	Gas and Water Works.
Chapchells.....	J. R. Irwin.....	Grist Mill.
Chastain.....	Muscogee Oil Co.....	Saw and Grist Mill.
Columbus.....	Columbus Barrel Mfg. Co.....	Double Cot. Seed Oil Mill.
Columbus.....	Columbus Barrel Mfg. Co.....	Barrel Factory.
Creswell.....	Co.....	Cotton Compress.
Dalton.....	Crown Cotton Mills.....	Saw Mill.
Douglasville.....	J. B. Baggett & Co.....	Enlarged Cotton Mill.
East Point.....	Blount & Hill.....	Grist Mill.
Elberton.....	Clark & Adams.....	Plow and Wagon Factory.
Elberton.....	Mattox & Hudgens.....	Machine Shop, &c.
Elberton.....	J. J. Burch & Co.....	Flour and Saw Mill.
Elberton.....	T. M. Swift.....	Grist Mill.
Griswoldville.....	J. R. Van Buren.....	Enlarged Fertilizer Fac'y
Gum Log.....	M. A. Adams.....	Saw Mill.
Hogansville.....	Cotton Improvement Co.....	Flour Mill.
Kinston.....	Gaines & Lewis.....	Fertilizer Factory.
La Grange.....	Troup Cotton Factory.....	Enlarged Flour Mill.
Lifsey's Store.....	McDaniel & Maples.....	New Machinery.
Livingston.....	T. V. Sanford.....	Cane Mill.
Livingston.....	Floorker & Sanford.....	Grist Mill.
Macon.....	W. T. Lang & Co.....	Saw Mill.
Mount Vernon.....	H. W. Carswell & Co.....	Double Hosiery Factory.
Newnan.....	Coweta Fertilizer Co.....	Saw and Shingle Mill.
Ophir.....	Franklin & McDonald.....	Fertilizer Factory.
Poulan.....	Gold Mining Co.....	New Machinery.
Rome.....	Geo. F. Montgomery.....	Planing Mill.
Rome.....	Rome Oil Mills & Fer. Co.....	Fertilizer Factory.
Rome.....	M. L. Flowers.....	Enlarged Works.
Savannah.....	Gorrie Ice Mfg. Co.....	Ice Factory.
Six Mile Stat'n.....	W. M. & R. J. Lowry.....	Marble Quarry.
Union Point.....	Knox & Fluker.....	Flour Mill.
Washington.....	Irvin, Callan & Co.....	Flour Mill.
Waynesboro.....	Waynesboro Cotton Seed Oil & Fertilizer Co.....	Cotton Seed Oil Mill.
West Point.....	J. E. Davis.....	Mill and Gin.
Winterville.....	James M. Smith.....	Cotton Seed Oil Mill.

KENTUCKY.

Arlington.....	Jacob Flegle.....	Mill.
Bellevue.....	Bellevue & Dayton Light Co.....	Gas Works.
Bowling Green.....	T. J. Morris.....	Flour Mill.
Burnside.....	Kentucky Lumber Co.....	Saw Mill.
Clinton.....	Adams & Kemp.....	Flour and Planing Mill.
Constantine.....	Setzer & Co.....	Saw Mill.
Covington.....	Lane Nat. Cable Rwy. Co.....	Cable Railway Machinery.
Covington.....	Star Mfg. Co.....	Gas Machines.
Covington.....	Checker Cure Co.....	Patent Medicines.
Covington.....	D. Green Railroad Bridge & Tunnel Indicator Co.....	Patent Medicines.
Covington.....	Kentucky Coal Mining Co.....	Coal Mining.
Covington.....	Monarch Novelty Co.....	Novelties.
Glasgow.....	Clark-Wardner Co.....	Novelties.
Greenup.....	Wood & Wilson.....	Saw Mill.
Henderson.....	Philip Klein.....	Saw Mill.
Lexington.....	Lexington Mfg. Co.....	Enlarged Factory.
Louisville.....	Louisville Spirit Cure Tobacco Co.....	Tobacco Factory.
Louisville.....	Coeur d'Alene Water & Mining Co.....	Mining.
Louisville.....	Falls City Varnish Co.....	Varnish Factory.
Louisville.....	Louisville Asphalt Var. Wks.....	Double Factory.
Louisville.....	Louisville Mfg. Co.....	Furniture Factory.
Louisville.....	W. C. Kelly & Co.....	Saw & Hatchet Factory.
Louisville.....	Golden King Mining Co.....	Mining.
Louisville.....	Eisenman Bros. & Co.....	Milling, &c.
Louisville.....	Curlin Switch & Crossing Co.....	Railroad Switches, &c.
Louisville.....	Meilwood Distillery Co.....	Increased Capital.
Louisville.....	Kentucky Plow Co.....	Plow Factory.
Louisville.....	Foster & Sulser.....	New Flour Machinery.
Louisville.....	Canady Bros.....	Planing Mill.
Louisville.....	Citizens' Gas Light Co.....	Gas Works.
Louisville.....	J. K. Stines.....	Planing Mill.
Newport.....	Hartsfield Portable Smelt'g & Mining Co.....	Smelters, &c.
Newport.....	St. Andrew's Bay R. R. & Land & Mining Co.....	Mining, &c.
Oakland.....	Boulins & Johnston.....	Saw Mill.
Owensboro.....	B. Baer.....	Ice Factory.
Owensboro.....	W. H. Clarke.....	Enlarged Tobacco Factory
Paducah.....	City Flouring Mills.....	Remodel Flour Mill.
Quincy.....	J. H. Cook & Co.....	Saw Mill.
Saundersville.....	Randall & Haskins.....	Saw Mill & Stave Factory.
Uniontown.....	Rich Grain Distillery Co.....	Distillery.
Upper Tygart.....	Woolum.....	Saw Mill.
Utica.....	York & Porter.....	Coal Mining.
Vine Grove.....	A. W. Burkhard.....	Flour Mill.
Winchester.....	King & Co.....	Machine Shop.
Winchester.....	J. L. Allan.....	Remodeled Mill.

LOUISIANA.

Donaldsonville.....	J. & W. Kelly.....	Rice Mill.
Donaldsonville.....	Donaldsonville Ice Factory.....	Ice Factory.
Gretna.....	Union Oil Co.....	New Oil Machinery.
Jennings.....	E. K. Shankland & others.....	Fruit Canning.
Lake Charles.....	Calcasieu Lumber Co.....	Planing Mill.
New Iberia.....	Gebert & Russell.....	Shingle Mill.
New Orleans.....	Eureka Steam Bag Factory.....	Bag Factory.
New Orleans.....	La. Excavating & Mfg. Co.....	Fertilizers.

LOCATION.	NAME.	BUSINESS.
New Orleans.....	N. Orleans Cold Storage Co., Ice, &c.	
New Orleans.....	Isaac Levy.....	Rice Mill.
New Orleans.....	J. A. Blaffer.....	Brick Yards.
New Orleans.....	La. Artesian Well Co.....	Boring Wells.
New Orleans.....	New Orleans Stave Co.....	Stave Factory.
New Orleans.....	Martinez Engine Oil Works.....	Oil Works.
New Orleans.....	Peoples Ice Factory.....	Ice Factory.
New Orleans.....	Henry Ois.....	Saw Mill.
New Orleans.....	Union Oil Co.....	Improved Oil Mill.
New Orleans.....	Foster & Son.....	Saw Mill.
New Orleans.....	S. B. Steers.....	Cotton Compress.
New Orleans.....	Charles Kirschburg.....	Soap Factory.
Plaquemine.....	Plaquemine Lumber & Shingle Co.....	Saw Mill.
Raceland (nr.).....	Theriot & Lepine.....	Rice Mill.
Shreveport.....	Jas. R. Jones & Co.....	Sash and Blind Factory.
Shreveport.....	Hamilton & Co.....	Soap Factory.
St. John's Par.....	L. D. Martin.....	Rice Mill.

MARYLAND.

Annapolis.....	Annapolis Glass Works.....	Glass Factory.
Baltimore.....	Nat. Patent Caisson Co.....	Caissons.
Baltimore.....	Sam'l. G. Taylor.....	Machine Shop.
Baltimore.....	Baltimore Pulverizing Co.....	Pulverizing Works.
Baltimore.....	Cumberland Coal Co.....	Coal Mining.
Baltimore.....	J. L. Strauss & Bro.....	Brewery.
Baltimore.....	Balto. Cider Vinegar Co.....	Vinegar.
Baltimore.....	U. S. Electric Lighting Co.....	Electric Lighting.
Baltimore.....	Irwin, Buck & Co.....	Factory.
Baltimore.....	Gail & Ax.....	Enlarged Tobacco Fac'y
Baltimore.....	Franklin Electric Works.....	Electric Supplies.
Baltimore.....	George Bauernschmidt.....	Enlarged Brewery.
Baltimore.....	Canton Copper Works.....	Rolling Mill.
Baltimore.....	James Bates.....	Foundry.
Baltimore.....	J. W. Babylon.....	Shoddy Factory.
Baltimore.....	Duffy Malt Whiskey Co.....	Bottling Works.
Baltimore.....	Southern & Western Improvement Co.....	Mining, &c.
Baltimore.....	Co-operative Druggists & Glassware Manf.' Ass'n.	Glass Factory.
Centerville.....	Feddeman & Clash.....	Machine Shop.
Daniel.....	F. Lewis.....	Grist Mill, &c.
Deer Creek.....	S. B. Silver & Bro.....	Canning Factory.
Denton.....	Frank W. Redden.....	Saw Mill.
Frederick.....	Md. Hedge & Vine Fence Co.....	Patent Fences.
Greensborough.....	D. S. Truitt.....	Canning Factory.
Marriottsville.....	Ralston & Walden.....	Marble Saw Mill.
Mt. Ararat.....	Frank Armstrong.....	Granite Quarry.
Myersville.....	Josiah Harp.....	Flour Mill.
New Windsor.....	Bisor & Hawk.....	Hosiery Factory.
Prospect.....	Enfield, Day & Co.....	Grist Mill.
Sam's Creek.....	J. L. Devilbiss.....	Improved Flour Mill.
Smithburg.....	Maryland Copper Mining Co.....	Copper Mining.
St. Michael's.....	Geo. W. Tyler.....	Canning Factory.
Sykesville.....	Bennett & Barnes.....	Wagon Factory.
Upper X Roads.....	C. Rutledge.....	Canning Factory.
Yellow Spgs (nr).....	Philip Shankel.....	Saw Mill & Chair Fac'y

MISSISSIPPI.

Anding Station.....	Mann & Pugh.....	Grist Mill, &c.
Batesville.....	Tucker & Broome.....	Spoke & Handle Factory.
Columbus.....	L. K. Adams.....	Tannery.
Gallman.....	Co.....	Broom Factory.
Grenada.....	Grenada Compress Co.....	Compress.
Handsborough.....	Co.....	Canning Factory.
Meridian.....	Meridian Phosphate Co.....	Fertilizer Works.
Mississippi City.....	Gulf Coast Canning Co.....	Canning Factory.
Vicksburg.....	Louis Hoffman Hardware Co.....	Manufacture Hardware.
West Point.....	J. E. Davis.....	Grist Mill and Gin.

NORTH CAROLINA.

Asheville.....	B. M. Perron.....	Tobacco Factory.
Bell's Ferry.....	J. E. Speir.....	Distillery.
Buffalo Paper.....	E. W. Stubbs.....	Machine Shop, &c.
Charlotte.....	F. W. Abrams.....	Machine Shop.
Charlotte.....	Sam. Ashbury.....	Machine Shop.
Charlotte.....	Hirsh & Margolins.....	Cotton Tie Factory.
Clemmons.....	Strupe & Co.....	Grist & Saw Mill.
Company Shops.....	L. S. Holt.....	Enlarged Cotton Mill.
Elk Park.....	P. M. Smart & Co.....	Saw Mill.
Farmington.....	Frank Johnson.....	Flour Mill.
Gibson's Sta., nr.....	Dr. McNair.....	Grist Mill.
Goldsboro.....	Stevens Bros.....	Flour Mill.
Goldsboro.....	H. C. Parrot.....	Saw Mill.
Graham.....	G. K. Faust.....	Canning Factory.
Greensboro.....	Greensboro Gas Co.....	Enlarged Works.
Helton.....	Perkins, Waugh & Co.....	Woolen Mill.
Jackson Co.....	Fairfield Gold Mine.....	Mining.
Lenoir.....	P. I. Johnson & Co.....	Saw Mill.
Milton.....	E. D. Winstead & Co.....	Tobacco Factory.
Mitchell Co.....	Boyce & McNab.....	Saw Mill.
Montgomery Co.....	Steele Gold Mine.....	Mining.
Montgomery Co.....	Ophir Mine.....	New Machinery.
Mt. Airy.....	Sides & Spangh.....	Saw and Planing Mill.
Mt. Airy.....	G. M. Booker.....	Tobacco Factory.
Mt. Airy (near).....	Shelton Sicefloss.....	Saw Mill.
Old Fort.....	Sprague & Hart.....	Hoghead Factory.
Raleigh.....	N. C. Wire & Pick. Fence Co.....	Patent Fences.
Salisbury.....	Henkins & Sons.....	Tobacco Factory.
Snow Hill.....	Thomas Moore.....	Mill.
Tarboro.....	Tarboro Oil Mills.....	Cotton Seed Oil Mill.
Thomasville.....	J. H. Lambeth.....	Canning Factory.
Tryon City.....	Hallenger & Weston.....	Saw Mill.
Vanceboro.....	G. F. Lancaster.....	Saw and Grist Mill.
Warsaw.....	J. K. Smith.....	Furniture Factory.
Washington.....	B. F. Rodman.....	Foundry.
Waynesville.....	G. V. Litchfield & Co.....	Saw Mill.
Whittier.....	C. V. Whittier.....	Saw and Planing Mill.
Whittier.....	M. D. Zackary.....	Flour Mill.
Wilmington.....	C. B. Wright.....	Brick Yard.
Wilmington.....	Carolina Oil & Cressote Co.....	Crescoting Works.
Wilton.....	Harris, Blackley & Co.....	Saw & Flour Mill.
Winston.....	B. F. Hanes.....	Tobacco Factory.
Winston.....	H. H. Reynolds.....	Tobacco Factory.

SOUTH CAROLINA.

Anderson.....	B. K. Beacham.....	Planing Mill.
Beaufort.....	Cartaret Mills.....	Foundry & Machine Shop.
Blacks.....	Simons & Bro.....	Lime Works.
Blackville.....	Grandy & Co.....	Saw and Planing Mill.
Flat Rock.....	A. J. Hart & Co.....	Canning Factory.
Greenville.....	Camperdown Cotton Mills.....	Improved Cotton Mill.
Greenwood.....	J. A. Oldham.....	Seed Mill, &c.
Grove.....	C. P. Rhodes.....	Brick Yard.
Mar's Bluff.....	W. F. Clausen.....	Tile Works.
Sleepy Hollow.....	Toole & Bradley.....	Saw Mill.
Thickety.....	D. H. Gambling & Sons.....	Saw and Grist Mill.
Walhalla (near).....	J. C. Neville.....	Pottery.

TENNESSEE.

Alama.....	C. C. Bailey.....	Mill.
Atoka (near).....	J. A. Meadows.....	Saw Mill.
Atoka (near).....	W. H. Werten.....	Grist Mill.
Chattanooga.....	Lookout Iron Co.....	Rolling Mill.
Chattanooga.....	Chattanooga Plow Works.....	Increased Capital.
Chattanooga.....	Chatta. Foundry & Iron Pipe Works.....	Enlarged Works.
Chattanooga.....	Enterprise Machine Works.....	New Works.
Chattanooga.....	Jacob Peyer.....	Cotton Mill.
Clarksville.....	Bowling Bros.....	Doubled Ice Factory.
Clarksville.....	W. A. Settle.....	New Flour Machinery.
Cleveland.....	Cleveland Woolen Mills.....	Woolen Mill.
Columbia.....	McLemore Bros.....	Doubled Mill.
Conyersville.....	J. A. Jackson & Son.....	Saw Mill.
Daisy.....	Tabler, Crupud Coal & Coke Co.....	Coal Mining, &c.
Denmark.....	Campbell & Rosser.....	Grist Mill and Gin.
Dorton's Moun.....	Titus, Angell & Daggett.....	Saw Mill.
Dover.....	Walter Bros.....	Grist Mill.
Goodrich.....	Standard Charcoal Co.....	Iron Furnace.
Graysville.....	L. B. Dennis & Co.....	Saw Mill.
Hillsboro.....	Thomas E. Jones & Sons.....	Saw Mill.

LOCATION.	NAME.	BUSINESS.
Hillsboro.....	Hughes & Morton.....	Distillery.
Johnson City.....	D. T. Nevins.....	Rim and Felloe Factory.
Knoxville.....	Scott & Dempster.....	Remodeled Flour Mill.
Knoxville.....	M. McClung.....	Grist and Feed Mill.
Knoxville.....	Schuyler Electric Light & Power Co.....	Electric Lights.
Lewisburg.....	Jarratt & Bro.....	Saw Mill.
Manchester.....	Stone Fort Paper Co.....	Wood Pulp Mill.
Maryville.....	O. N. Gibbons.....	Canning Factory.
Maryville.....	N. C. Boyd.....	Furniture Factory.
McAllister's.....	Rogers & Batson.....	Flour and Grist Mill.
McKenzie.....	T. B. Adams.....	Saw Mill.
McKenzie.....	Bullock & Collier.....	Saw Mill.
Midway.....	H. W. Shields.....	Remodeled Flour Mill.
Memphis.....	Williams & Co.....	Planing Mill.
Memphis.....	F. Campbell & Co.....	Steam Shirt Factory.
Memphis.....	Goodman, Barrett & Co.....	Trunk Factory.
Memphis.....	Memphis Fertilizer Co.....	Enlarged Fertilizer Works.
Mouse Creek.....	J. P. Pearson.....	Improved Mill.
Nashville.....	H. B. Grubbs Cracker Co.....	Cracker Factory.
Nashville.....	Halls, Ordway & Mitchell.....	Shoe Factory.
Nashville.....	Dyas Knitting Co.....	Hosiery Factory.
Nashville.....	W. M. Cassettey & Co.....	Grease and Oil Factory.
Nashville.....	Lanier Mill Co.....	Enlarged Mill.
New Market.....	Dick, Bro. & Co.....	Collar Factory.
Rockwood.....	Roane Iron Co.....	Repaired Furnace.
Rogersville.....	R. M. Rogan & Co.....	Furniture Factory.
Rogersville.....	Fulkerson, Stamps & Chesnut.....	Marble Quarry.
Rutherford Dpt.....	T. J. Wrenn & Son.....	Flour Mill.
Sharp's Corner.....	Puckett & Co.....	Saw Mill.
Shelbyville.....	J. C. Atkins.....	Canning Factory.
South Pittsburg.....	Tenn. Coal, Iron & R. R. Co.....	Enlarged Furnace.
Strawberry Pls.....	J. H. Sensibaugh.....	Flour Mill.
Sweetwater.....	Sweetwater Mills Co.....	Flour Mill.
Walden's Ridge.....	Allen Pickard.....	Distillery.
Walden's Ridge.....	J. H. Burnett.....	Heading Factory.

TEXAS.

Beaumont.....	Beaumont Iron Works.....	Foundry.
Bryan.....	J. H. Battee.....	Grist Mill and Gin.
Caldwell.....	T. R. Battee.....	Grist Mill, Gin, &c.
Corsicana.....	Electric Light Co.....	Electric Light Works.
Corsicana.....	Thompson & Honey.....	Ice Factory.
Dallas.....	Edison Electric Light Co.....	Electric Lights.
Denison.....	Denison Mining & Mfg. Co.....	Mining.
Denison.....	Alliance Milling Co.....	Flour Mill.
Double Springs.....	Neace & Hill Bros.....	Flour Mill.
Fort Worth.....	Wm. Annasser.....	Foundry.
Henderson.....	Still & Brenegar.....	Soap Factory.
Houston.....	B. A. Shepherd.....	Foundry.
Houston.....	Co.....	Flour Mill.
Lampasas.....	Matthews & Franklin.....	Coal Mining.
Lewisville.....	Lewisville Mill Co.....	Flour Mill.
Marshall.....	Marshall Water & Gas Co.....	Water and Gas.
Marshall.....	Texas Compress Association.....	Cotton Compress.
Marshall.....	W. H. Carter.....	Saw Mill.
Montague.....	Wash'n Williams & others.....	Flour Mill.
Palestine.....	A. B. Williamson.....	Flour Mill.
Queen City.....	W. J. Wickham.....	Saw Mill.
Sherman.....	Sherman Oil Works.....	Soap Factory.
Texas.....	East Texas Canning Co.....	Canning Factory.
Waco.....	Jenny Electric Light Co.....	Electric Lights.
Waco.....	Waco Lumber Co.....	Lumber.
Winona.....	Tucker Kay.....	Grist Mill.

VIRGINIA.

Alleghany Co.....	Frank Lyman.....	Iron Property.
Bruceton.....	J. W. Life.....	Improved Flour Mill.
Rufordville.....	E. G. Buck.....	Saw Mill.
Claremont.....	F. F. Atwood.....	Foundry.
Claremont.....	D. Blauvelt.....	Canning Factory.
Danville.....	{ Thomson-Houston Electric Light Co..... }	Electric Lights.
Danville.....	Thomas J. Lee.....	Flour Mill.
Farmville.....	Farmville Mfg. Co.....	+Grist Mill.
Goshen Station.....	J. H. Latner.....	Manganese Mining.
Harris-onburg.....	J. W. Taliaferro.....	Boot & Shoe Factory.
Harrisonburg.....	Rohr & Hile.....	Brick Yard.
Lacey Springs.....	C. H. Nicholas.....	Flour Mill.
Lynchburg.....	Ford, Moorman & Co.....	+Tobacco Factory.
Lynchburg.....	Moorman & Bro.....	+Tobacco Factory.
Lynchburg.....	Timberlake, Jackson & Co.....	Tobacco Factory.
Marlboro.....	C. E. Cunningham & Co.....	Flour Mill.
Meads-ville.....	A. E. Pool.....	Flour Mill.
Middletown.....	Randall & Guyer.....	+Grist Mill.
Millboro Depot.....	Gillespie Bros.....	Saw & Planing Mill.
Mt. Crawford.....	Saunders Bros.....	Wagon Factory.
Newport News.....	South Western Asphalt Co.....	Asphalt Works.
Norfolk.....	J. L. Carman Lumber Co.....	Saw Mill.
Norfolk.....	S. R. White & Co.....	+Foundry.
Richmond.....	National Granite Co.....	+Granite Quarries.
Richmond.....	B. D. Chalkley.....	Tannery &c.
Richmond.....	Hardwicke & Mitchell.....	+Planing Mill.
Richmond.....	Atlantic & Virginia Fer. Co.....	Enlarged Works.
Richmond.....	James McDonough & Co.....	+Carriage Works.
Richmond.....	{ Richmond Schuyler Elec- tric Light Co..... }	Electric Lights.
Richmond.....	{ Southern Schuyler Electric Light Co..... }	Electric Lights.
Roanoke.....	Virginia Hedge Co.....	Patent Fences.
Roanoke.....	W. Terry & Co.....	Enlarged Tobacco Fac.
Roanoke.....	W. K. Andrews & Co.....	Enlarged Tobacco Fac.
Sangersville.....	John S. Garber.....	Spoke & Handle Factory.
Singer's Glen.....	Funk, Baer & Co.....	+Sash & Door Factory.
South River.....	{ Kinnear & Campbell Iron Ore Mines..... }	+Mining.
Stribbling Spgs.....	— Driver.....	Stave Factory.
Tollersville.....	Adams Copper Mining Co.....	Mining.
Tollersville.....	Furnan Mining Co.....	Mining.
Warrenton.....	H. M. White.....	Improved Mill.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

The Capital City Street Railway Co., Montgomery, Ala., have increased their capital stock and will extend their lines and build a large stable.

B. G. DeFoe, of Ohio, is in Birmingham, Ala., with a view to organizing a stock company to establish iron fence works in that city.

Gabert & Macklin have received the contract for erecting, in Birmingham, Ala., the flouring mill for the Wharton Mills Co., previously reported. The cost will be about \$40,000.

P. B. Brown, will enlarge the capacity of the Anniston Ice Factory, Anniston, Ala., during the winter.

The contract for building the water works at Montgomery, Ala., has been let to Howland & Co., Boston, Mass. Work will begin within three months.

J. B. Patton, Rome, Ga., has just received the contract for building a court house at Jacksonville, Ala., to cost \$14,000.

R. G. Hervery, of Sheffield, Ala., Henry Habbder, Wm. B. Wood, Enoch Ensley and Philip Campbell have incorporated the Sheffield Terminal Railway Company to build a railroad from the Tennessee river to Montgomery, Ala., and with privilege to build Northward to the Tennessee State line. Capital stock \$250,000.

Riddle Bros., Cragdale, Ala., are reported as contemplating putting up a stamp mill.

A cotton seed oil mill company, it is stated, is being organized in Selma, Ala., to build a new cotton seed oil mill in that city.

James A. Carney, Carney, Ala., has completed his saw mill, capacity 30,000 feet, and will add planer and dry kilns.

Wm. Glover reports that he will work a silver mine near Tecumseh, Ala.

ARKANSAS.

The Keystone Manganese & Iron Co. has been chartered at Johnstown, Penna., by P. E. Chapin, James McMillon, C. P. Sellis and John Fulton, of Johnstown, Pa.; T. C. Bates, of Worcester, Mass.; J. King McLanahan, of Hollidaysburgh, Pa., and Geo. W. Gregory, of Boston, Mass.; to work manganese mines in Arkansas. Capital stock \$500,000.

FLORIDA.

John B. Roche, Jacksonville, Fla., will move his brick yard to a point six miles from that city and contemplates erecting a saw mill there.

L. W. Johnson has started an axe handle and spoke factory at Lake City, Fla.

Seville, Fla., is discussing water works.

J. C. Cosgrove, Pensacola, Fla., is putting new machinery into his foundry and machine shop.

A saw mill is being built at Hawkinsville, Fla., by Mr. Douglas.

GEORGIA.

The grist mill, previously reported as to be built in Elberton county, Ga., by J. J. Burch & Co., will cost about \$5,000.

A bill has been introduced into the Georgia legislature to incorporate the Athens & Jefferson Railroad Co.

Foster & Bro. have completed their mill at Thomas Mills, Ga.

Armstead Harper, Rome, Ga., is in Cedar-town, Ga., representing a company who desire to start a foundry at that place. Negotiations are pending.

The Gorrie Ice Manufacturing Co., of Savannah, Ga., previously reported as organized and having ordered machinery, has commenced work on their factory.

Some efforts are being made to secure the location of a nail mill in Rome, Ga.

James M. Smith, Winterville, Ga., previously reported as intending to build a cotton seed oil mill, will put up a mill costing about \$10,000.

The Classic City Street Railroad Co., of Athens, Ga., previously reported, have awarded the contract for building their road to James G. Scott.

KENTUCKY.

Harry Guenther, Owensboro, Ky., will shortly add a foundry to his machine shops.

The Martin Tobacco Manufacturing Co., Paducah, Ky., will erect a large three story building to enlarge their capacity.

George E. Curran will build in Louisville, Ky., a \$10,000 warehouse for the Common Sense Fertilizing Co.

An electric light Company is talked of in Winchester, Ky.

The Ohio Valley Railroad Company will push the work of building their road from Henderson, Ky., to Jackson, Tenn. Contracts have been awarded to J. R. Serpell, Marshall Morris and T. H. McMichael, all of Louisville.

The Lexington Leather Lubricating and Renovating Company, Lexington, Ky., has been organized by the election of Wm. C. Goodloe, president, and Theo. M. Shaw, secretary and treasurer; have leased a building and will manufacture blacking, harness oil, &c.

LOUISIANA.

The Louisiana & Western Railway, it is reported, will be extended from Lafayette to Baton Rouge, La.

Henry Otis, New Orleans, La., whose saw mill was lately burned, (loss \$30,000) is rebuilding, and will put in a double band mill.

The Farmers' Rice Mill, at Point-a-la-Hache, La., previously reported as burned, (loss about \$10,000,) will be rebuilt.

MARYLAND.

John Q. A. Holloway, John W. McCoy, William A. Hanaway and Sebastian Brown, of Baltimore, and W. H. Shock, of Washington, D. C., have incorporated in Baltimore the Excelsior Electric Light Co., capital stock \$300,000, to manufacture electricity for power and lighting.

The Cumberland Iron Works, Cumberland, Md., will, it is stated, put in considerable new machinery.

MISSISSIPPI.

It is stated the Mobile & Ohio Railroad will build machine shops at Okolona, Miss.

NORTH CAROLINA.

A prize house 100x200 feet will be built in Raleigh, N. C.

There is some prospect of the building of smelting and reduction works at Salisbury, N. C.

Work on the Clinton & Warsaw (N. C.) Railroad is to be commenced very shortly. The road will be 12 miles long, connecting Warsaw with Clinton, N. C.

Elliott & Marsh, Charlotte, N. C., are enlarging their furniture factory.

J. M. Erwin, Rocky River, N. C., has put up a mill and gin.

The Warm Springs Hotel property, Warm Springs, N. C., has been sold for \$100,000. The purchasers will erect a large hotel with modern improvements.

SOUTH CAROLINA.

The Red Bank Cotton Manufacturing Mill, in Lexington county, S. C., has been sold to T. C. Robertson and Willie Jones, of Columbia, S. C., for \$23,500.

TENNESSEE.

W. A. Settle, Clarksville, Tenn., will build a new full roller mill, and wants bids.

The Wartrace Flouring Mill, Wartace, Tenn., has been overhauled and repaired, and is now in operation.

The Gallatin Manufacturing Company, has been organized at Gallatin, Tenn., by B. D. Bell, C. W. Watkins, James I. Walton and others, to manufacture hubs, spokes, etc.

The Tennessee & Great Northern Railroad Co. has been incorporated in Tennessee by A. J. Lyon, F. L. Peck, Henry Rosendale, Wm. H. Shyrock, S. Waddell and Geo. G. Bell to build a railroad from Union City to Obion Station, with a branch to Tiptonville, Tenn.

It is reported that W. A. Schofield of Nashville, Tenn., and others will organize a company to establish a manufacturing town, near Nashville.

Efforts are being made to organize a \$10,000 cheese factory company in Cleveland, Tenn.

The Memphis & Lake View Motor Railway Co., of Memphis, Tenn., has been organized by the election of W. N. Brown, president. A committee has been appointed to secure the right of way for the road.

Kendrick, Pettus & Co., Clarksville, Tenn., have purchased the City Mills of that place and will make some important improvements.

TEXAS.

The Eagle Pass Manufacturing & Irrigating Company has been organized at Eagle Pass, Texas; capital stock \$100,000.

J. M. Bassett, Colorado, Texas, will establish a steam laundry; has ordered machinery.

The municipal authorities of Galveston, Texas, are still figuring on the proposed water works.

The El Paso, St. Louis & Chicago Railway & Telegraph Company, has been chartered in Texas; capital \$400,000. The road is to run from El Paso to South New Mexico.

Hooks & Simpson, Kountze, Texas, will rebuild the saw mill of J. D. Hooks, previously reported as burned.

A. T. Anderson, Kildare, Texas, whose planing mill was lately burned, will rebuild.

The Dallas Electric Lighting Company, Dallas, Tex., will enlarge their plant.

VIRGINIA.

A. B. Eddins, Richmond, Va., is erecting a 4-story brick tobacco factory 60x100 feet.

Maddock & Evans have leased the Grubb Mines, Blue Ridge Springs, Va.

Jones, Watts & Co., Lynchburg, Va., have purchased an old tobacco factory property and will probably erect on it a large warehouse.

The large mill of J. E. Douglas, Aldie, Va., is being remodeled at the cost of several thousand dollars. The capacity will be increased.

John F. Newlon, Aldie, Va., has put new machinery into his corn and flour mill.

Merrell, Estes & Ford, Pamplin City, Va., whose pipe factory was lately reported as burned (loss \$17,000), will be build, and will put up a four-story brick factory.

The Longdale Iron Company, Longdale, Va., previously reported as intending to build a short railroad, are now grading a 7½ mile road to coal lands that they will work.

WEST VIRGINIA.

Walter S. Cox, W. F. Mattingly, W. E. Howard, G. F. Howard and M. F. Halleck, all of Washington, D. C., have incorporated in West Virginia the Petroleum, Fuel & Motor Co., to introduce devices for using petroleum for fuel. Capital stock \$5,000. Principal office to be at Washington, D. C.

The Riverside Iron Works, Wheeling, W. Va., are repairing their blast furnace.

The Nuttallburg Coal & Coke Company of Nuttallburg, W. Va., it is reported, propose to build a ten mile railroad to some new coal land to be developed, but the company write us that "the report is premature."

BURNED.

Soap factory of Chapham & Co., Nashville, Tenn. Loss \$15,000 to \$20,000.

Large gin, presses, &c., of J. C. Williams, Kingston, Miss.

Gin and mill of A. W. High, Pleasant Point, Texas. Loss \$3,000.

Distillery of M. M. Lineberger, Iron Station, N. C.

Gin of Wellborne & Johnson, Clarendon, Ark. Loss \$6,000.

Neil Morrison's saw mill and ginnery, near Hawthorn, Fla.

The Alleghany Warehouse, owned by F. M. Carrington, Richmond, Va. Loss is \$50,000.

Gin house of F. M. Perry near Florence, Ala.

The Mayo Ice Factory, Orlando, Fla., damaged \$10,000 by explosion.

Steam mill and gin of Joseph & Samuel Smith near Grenada, Miss.

Steam saw mill and gin of W. C. Harvell, St. Helena Parish, La., damaged \$5,000 by explosion.

Steam grist mill of Lewis Fraser, Hebron, S. C.

New Foundry.

OWENSBORO, KY., October 12th, 1885.

Editor Manufacturers' Record:

I have my foundry built, and cupola nearly finished; will take off first heat in about a week. Capacity of cupola 3 tons.

HENRY GUENTHER.

New Saw Mill.

CORNEY, ALA., October 11th, 1885

Editor Manufacturers' Record:

I have built a new saw mill at this place. 30,000 feet capacity. In time I intend putting in planer and dry kilns.

JAS. A. CARNEY.

A \$100,000 Ice Manufacturing Company.

NEW ORLEANS, LA. Oct. 8th, 1885.

Editor Manufacturers' Record:

Our new ice factory will be named People's Ice Manufacturing Company. Capital \$100,000. Capacity 75 tons per day.

ALBERT J. MICHAELIS,

Gen'l Manager.

LOCKWOOD, GREENE & CO. MILL ENGINEERS

Office, 65 Westminster St., Providence, R. I.

Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old.

Putting in Cotton Machinery.

COMPANY SHOPS, N. C., Oct. 5, 1885.

Editor Manufacturers' Record:

We have just returned from the east where we purchased the following machinery, and will set same in our Atmahaw Mills about Nov. 1st: 16 Whitin-Wilman cards, with all improvements; 2 Drawing Frames, 12 deliveries; 2 Providence Machine Company's fly frames, 188 spindles; 7 Whitin gravity spinning frames, 1120 spindles. Will make warp and filling, which we sell at our door at much better prices than Philadelphia and New York pay.

HOLT, GANT & HOLT.

New Cotton Compress.

NEW ORLEANS, Oct. 5, 1885.

Editor Manufacturers' Record:

I have purchased a square of buildings known as the Bull's Head Tobacco Warehouse, which is now being converted into cotton sheds, and I am erecting on same premises one of my new 90-inch Morse Cotton Compressors, a fac-simile of the one exhibited last year and awarded a gold medal at the New Orleans World's Exposition. The whole plant will be completed by Nov. 1st, next.

S. B. STEERS.

Boiler Works.

MOBILE, ALA., Oct. 6, 1885.

Editor Manufacturers' Record:

I have erected a boiler factory in this city, the building is finished and occupies lots 67 and 69 north Water street, but is not fitted up as yet to do new work. I intend to fit it up with steam power, and run power punch, shears, rolls, drill presses, &c., as soon as possible, and to build and repair boilers, tanks, &c.; also to do sheet iron work, steam fitting and blacksmithing.

GEO. W. RICHARDSON.

Putting in New Machinery.

GRANT'S LICK, KY., Oct. 6, 1885.

Editor Manufacturers' Record:

We are putting some new machinery in our mill and contemplate adding still more.

MYERS & CROPPER.

New Saw Mill.

FAIRFIELD, ALA., Oct. 7, 1885.

Editor Manufacturers' Record:

We are building a saw mill and will have it at work by the last of this month; it is a 20-horse power mill.

HARE & CO.

TEMPLE, TEXAS, Oct. 10th, 1885.

Editor Manufacturers' Record:

The G. C. & S. F. R. R. Company are enlarging their shops here, and putting in some new and additional machinery.

J. J. HOKE.

Chair Factory and Mill.

YELLOW SPRINGS, MD., Oct. 9, 1885.

Editor Manufacturers' Record:

I am building a chair factory and mill.

P. H. SHUNKLE.

A Fertilizer Factory.

COLUMBIA, S. C., October 12th, 1885.

Editor Manufacturers' Record:

Will not build our fertilizer factory until next spring; could not erect acid chambers in time for next season's work.

JONES, ROBERTSON & CO.

New Saw Mill.

RED LEVEL, ALA., Oct. 10, 1885.

Editor Manufacturers' Record:

Our mill is thirty-horse power; capacity, ten thousand feet per day; will be ready for business by first of November.

P. J. GANTT & CO.

Why a Cotton Mill in Dallas Would Pay.

DALLAS, TEXAS, October 6, 1885.

Editor Manufacturers' Record:

We are now operating an average of one hundred and fifty people making shirts, drawers, overalls and pants. We have the latest modern machinery and make from one to two thousand garments daily. We are now sold largely ahead of production, and will commence immediately to build a factory and jobbing warehouse 75x200 feet, four stories; will increase our present production next year about double.

We have the finest opening in America for a good cotton and woolen mill; we have abundance of cotton and wool, home production, cheap coal, and a splendid wholesale market in the midst of the finest country in the Union. We could cut up ourselves the production of a mill of considerable capacity. It is strange to us, with such advantages to be found at no other place in the South to equal us, capitalists and manufacturers do not find us. The saving in freights alone would be a good profit to any mill. For instance:

1 bale cotton, 500 pounds @ 8½¢... \$42.50
Freight to mill, \$1.10 per 100 pounds... 5.50

\$48.00

Say it produces 2,000 yds. drill, freight on same to return to us, \$1.25.... 6.25

Total..... \$54.25

or a clear saving to the manufacturer at Dallas of \$12.00 per bale, or nearly 30%, which would be in itself a fine profit, and then sell for what the eastern manufacturers goods actually cost, or we could ship the goods to New York and sell them against any competitor. However, that would not have to be done, as our market would easily take up the production of a mill of a million dollars capital, or as large as the Eagle and Phenix of Columbus. BLANKENSHIP & BLAKE.

The Outlook in Trade.

Perhaps the most marked feature of the week which has passed has been a return of confidence in business matters. Money has for a long time been very abundant, stocks have fallen to a very low figure, and many kinds of mercantile commodities can be purchased far more cheaply than ever before. But capitalists, as well as men generally who have had a little money to invest, were chary of putting it into enterprises that were new to them. They thought it better to forego the profits which they possibly, and indeed probably, would have made by these ventures, rather than run any risk. It was better for them to keep their surpluses in their own hands, although they thereby lost the greater profit which might have been reaped, than trust it to any one else. It is unnecessary to say that business is not built up in this way, but no inducements that were offered were sufficient to overcome this reluctance of action which characterized the community. Such has been the condition of affairs for a long time, but the tide now seems to have changed. While it would be untrue to say that a great era of business activity has begun, it can be really said that there is a revolution in the popular mind, and that there is a marked difference of feeling in commercial circles. At the Stock Exchange the week has been the heaviest for many months; the West is alive with industry, in spite of the small value of its wheat crop, and many kinds of manufacture are springing again into increased production. The East feels this impulse less than the other parts of the country, but it is present everywhere.

It is hardly necessary to point out all the sources of this growth of trade. They may be summed up in the statement that every part of the United States is growing, and that such growth also means wealth. Our cotton crop this year will be as large as any ever known, and larger than that of any

other year except one or two; the corn crop is very great, and the yield of the minor agricultural products is unequalled by any other country. These products are brought by the railroad system, which now permeates every part of the Union, at a very low cost to the consumer, the surplus going to feed the rest of the world. The population of the United States, however, has ceased to be purely agricultural, as it was, with slight exceptions, in the days of Washington and Franklin. We have now, thanks to the system of which Hamilton was the earliest and most prominent advocate, a thousand branches of industry which divide with and react upon each other, and it is these which have of late been the most depressed. They will all move forward when one does, and that current seems now to be in motion. The bank surplus this week has been lessened, the money being called for in trade; railroad troubles seem likely soon to be at an end, as they find that it is more profitable to have peace with each other than to be at open war; the slaughtering of dry goods at auction, which was known last year, has not been repeated; anthracite coal is stiffening up, and grocery articles are finding good sales.

Leather men have also been selling largely, and many of the machine works of the country have been pressed with orders. Everything now seems likely to be prosperous, and only one disturbing cloud appears in the sky. There is no reason, naturally, why the approach of a sitting of Congress should excite distrust in the business community, or why they should wish it postponed, but experience has taught them that at every session attempts are made to alter the taxes on imports. The change may only be trifling, but the effect is paralyzing, not only in the branch which is touched, but in all others. By the stroke of a pen that body can render whole communities beggars. This, and this alone, is the only reason why there need be any apprehension as to whether there will be a revival of the industries of the country. Shall we be spared the usual attempt at change?—New York Telegraph.

Blasting at Hell Gate.

The great explosion at Hell Gate, for which preparations were being made for several years, took place last Saturday. Flood Rock was situated about mid-channel, due north from Hallett's Point, and from twelve hundred to fifteen hundred feet from the Astoria shore. It had an area of about eight acres, of which only about two hundred and fifty square feet showed above high water mark. The same general plan of operations was adopted here that proved so successful at Hallett's Point. Around the highest point of the rock a seawall was built, the enclosed area being filled with broken stone, to afford space for erecting the necessary buildings. The artificial island thus created was about seven feet above high water. In the center the main shaft was sunk, having a depth of sixty-seven feet. A few feet away was another shaft, forty feet deep, opening into the same heading as the main shaft. The smaller shaft was used for machinery, and the tubes for conveying the compressed air, which drove the drills and gave the men at work the necessary fresh air which could not be introduced otherwise. The main shaft was used for removing the excavated rock. The first series of headings branched out from the main shaft at a depth of about forty feet, and from the bottom of the shaft diverged another series of headings directly under those above. Those headings branched at right angles every twenty feet, and were sixty in number on each tier. This double system of headings was employed, in order to gain a sufficient depth after the explosion, without the labor and expense of dredging to remove broken rock, as was necessary at Hallett's Point. The total length of tunnelling was about

four miles, consisting of twenty-four galleries running north and south, and forty-six running east and west. The longest of these was 1,200 feet in length, 6 feet wide and 10 feet high. There was a thickness of from 10 to 25 feet between the roof of the top tier of galleries and the water. There were 467 pillars left to support the roof. These were 15 feet square. The whole rock was honeycombed with tunnels. Eight drills of most improved patterns were employed in preparing the blasts and making the receptacles for the cartridges. In round figures, 80,000 cubic yards of rock have been removed. This was carried to the surface by means of an elevator in the main shaft, to which it was transported in small wagons on narrow-gauge trucks running through the tunnel. Thirteen thousand two hundred and eighty-six chambers for holding the cartridges—each three inches in diameter and about nine feet deep—were drilled in the pillars and roof at distances of four or five feet apart. These chambers were filled with "Rackarock" dynamite cartridges, of which there were about 47,000, each being two and a half inches in diameter, two feet in length and containing six pounds of explosive. The cartridge cases were made of thin copper. It was found some months ago that many of the cartridge cases had corroded, and it was found necessary to take them all out and put new ones in, which had been dipped in melted beeswax. A large quantity of the latter expensive commodity was used in this work. In addition to the "Rackarock" cartridge, there were several hundred ordinary dynamite cartridges, to which the wires connecting with the detonating batteries were attached. It was through these latter that the simultaneous shocks causing the explosion of all the cartridges were produced. It is estimated that 285,000 pounds of explosive were used. Over 500,000 feet of wire were used in connecting the blasts and the batteries.

A Gold Mining Company.

LOUISVILLE, KY., Oct. 9, 1885.

Editor Manufacturers' Record:

Our company has been formed, with principal place of business at Louisville. Location of mine, Idaho Territory. Will engage in gold mining.

S. P. SHEPARD, Secretary,
IDAHO MINING COMPANY.

LYNCHBURG, VA., Oct. 12, 1885.

Editor Manufacturers' Record:

We purchased a lot of ground on Lynch street on which there is an old tobacco factory. We contemplate putting up a large new building 54x132, but may not do so immediately. JONES, WATTS & CO.

THE Baltimore Times Publishing Company, which has been publishing a very vigorous Sunday paper, has commenced the publication of a daily evening paper. The first issues give promise of a remarkably bright, active and readable paper. Mr. Ford, the editor, is an accomplished journalist, and we feel quite sure, that in his hands, the Times will take a prominent place in the newspaper field.

THE Daily Telegraph, of New York, was just one week old last Tuesday, and yet it has already scored a decided success. It is a bright, clean 8-page paper, independent in politics, but thoroughly in earnest in its devotion to the protection of American industries. May its prosperity be as great as its merits is the wish of the MANUFACTURERS' RECORD.

Talk of Steel Works in Birmingham—Other Matters of Interest.

[Special correspondence BALTIMORE MANUFACTURERS' RECORD.]

BIRMINGHAM, ALA., October 12, 1885.

In most directions interesting to readers of the MANUFACTURERS' RECORD, the week past has been rather uneventful in this part of the country. The question of the long discussed and much hoped for Union railway station was revived in connection with a visit to Birmingham of Mr. Milton H. Smith, president of the Louisville & Nashville railway, who spent last Friday in town. As generally reported president Smith came principally with a view to some final consideration of the matter, and it is supposed that a conclusion, one way or the other, is at hand. There can be no two opinions as to the vital necessity for action, since this considerably important railway centre is absolutely without depot accommodations. It was once proposed that the Louisville & Nashville, Cincinnati, New Orleans & Texas Pacific system should join in the erection of a combined Union station and hotel, the latter feature to be something metropolitan and worthy of the importance and ambitious views of the city, and the L. & N. people were inclined to think very favorably of the scheme. Mr. Bond, president of the C. N. O. & T. P. company, could not see his way clear to join in the project, and, it is said, in that form to have fallen through. As far as can be judged at present the probabilities are that the hotel will not be built by the railway interests, and that the L. & N. will construct the station, renting its use to other lines. It is needless to add that any action in the premises will be quite without reference to the order of the Alabama railway commission, directing the immediate erection of depots by the L. & N. and Erlanger systems. The railway mind does not appear to have been extensively impressed by that manifestation of paternal interest in the affairs of the corporations sought to be affected by it.

THE IRON MARKET, ETC.

The situation in the local iron market remains much as reported last week. There is still a very active demand at the prices then quoted, which, however, are not as satisfactory to our producers as they might be. As cost runs at present there is no doubt some margin of profit to the iron masters, but they all look for an improvement in the price of pig metal, and are disinclined to trouble themselves beyond filling orders for immediate delivery in moderate lots. The prospect of an advance has not been realized as yet, but the current pressure upon the market, if continued, must result in one soon. The situation is firm at the prices given in my letter a week ago. Sloss Furnace No. 1 is out of blast for repairs, and No. 2, which has been out for the same purpose for several weeks, was to go in again to-day. All the other furnaces in the district are active and producing

about as previously reported.

Work on the new furnaces still progresses. As to other new enterprises there is little of moment to note. There is a good deal of talk about the establishment of a bridge plant at Birmingham by Ohio parties. A representative of the proponents has visited here and made an examination of the opportunities and facilities. There is an undeniably good opening for such an enterprise. A market already sufficient to support it, and constantly growing, exists in the region tributary, and the cheapness with which the necessary materials can be turned out ought to prove attractive to people interested in the particular industry. On the other hand it is also true, perhaps, that the attraction would be greater if there were several rolling mills at Birmingham instead of one only. True the solitary establishment in question is a large one, splendidly equipped, and competent to turn out first class work of any desired description, but people who propose adventures, more or less dependent upon such institutions, like to locate in places where they will have

possibility in respect to the future of this center. Readers of the MANUFACTURERS' RECORD have before this absorbed a pretty accurate estimate of the relations which this point and its environment bear toward the growing population of the Mississippi Valley and the lower Atlantic Coast States. By way of the Louisville & Nashville, the Erlanger, Georgia Pacific, Mobile & Ohio, and Illinois Central systems, this district is within striking distance, commercially, of a third, anyway, of the United States east of the Mississippi river. These facilities for transportation will be increased by and by, through the improvement of the Tennessee river. The material conditions present in Birmingham are favorable enough to give the town a bright future, based only on the production of iron, but if a steel industry, founded on our native iron, could be established successfully, it does not require prophetic vision to understand that a manufacturing center of large proportions would be a certain result.

A SOLVABLE PROBLEM.

Is there then any reasonable probability

de-siliconized and de-phosphorized in a single converter. Much has been said concerning the probability that the St. Louis interest, contesting the Thomas-Gilchrist patent, will be able to break the "dog-in-the-manger" hold of the Bessemer folk upon it. The reason assigned, that the patent will not hold water, is perhaps not the best in the world. A powerful corporation, with plenty of money to spend, and which it is to its interest to spend, in the courts, has too often proven a better title to an otherwise worthless patent, than the sum of all the just claims ever filed in the office of the commissioner at Washington. But while this litigation is dragging its slow course through the forum, there are sharp wits always at work on the subject. It is claimed, for instance, that the Thomas-Gilchrist patent, even if our Bessemer friends manage to keep control, cannot be made to cover a process identical in principal and result, but differing in that the iron is de-carbonized and de-siliconized in an acid converter, and at the proper time drawn off into a second one furnished with a basic lining. A patent on this, too, is claimed by some one, but even at that, the chances are that it could be made available on living terms. By both the Thomas-Gilchrist and the process last mentioned, our iron has been fully tested, and has been found to make everything desirable in the way of steel. A leading iron master of the district assured me the other day that it was only a question of a little time when he should begin the construction of a steel plant, and that there was absolutely nothing, outside of the legal troubles referred to, which could prevent the establishment of the industry in Birmingham on any scale. If the general business interests of the country were on a more satisfactory basis, and the markets to which we must look for support a trifle more advanced in point of purchasing power, this matter of the local manufacture of steel would be pushed harder. Your readers may be sure that long before the country shall experience flush times again, steel will be made in Birmingham, and that Birmingham steel will create quite as marked a sensation in Northern and Eastern markets, as Birmingham iron has in the past.

G. B. W.

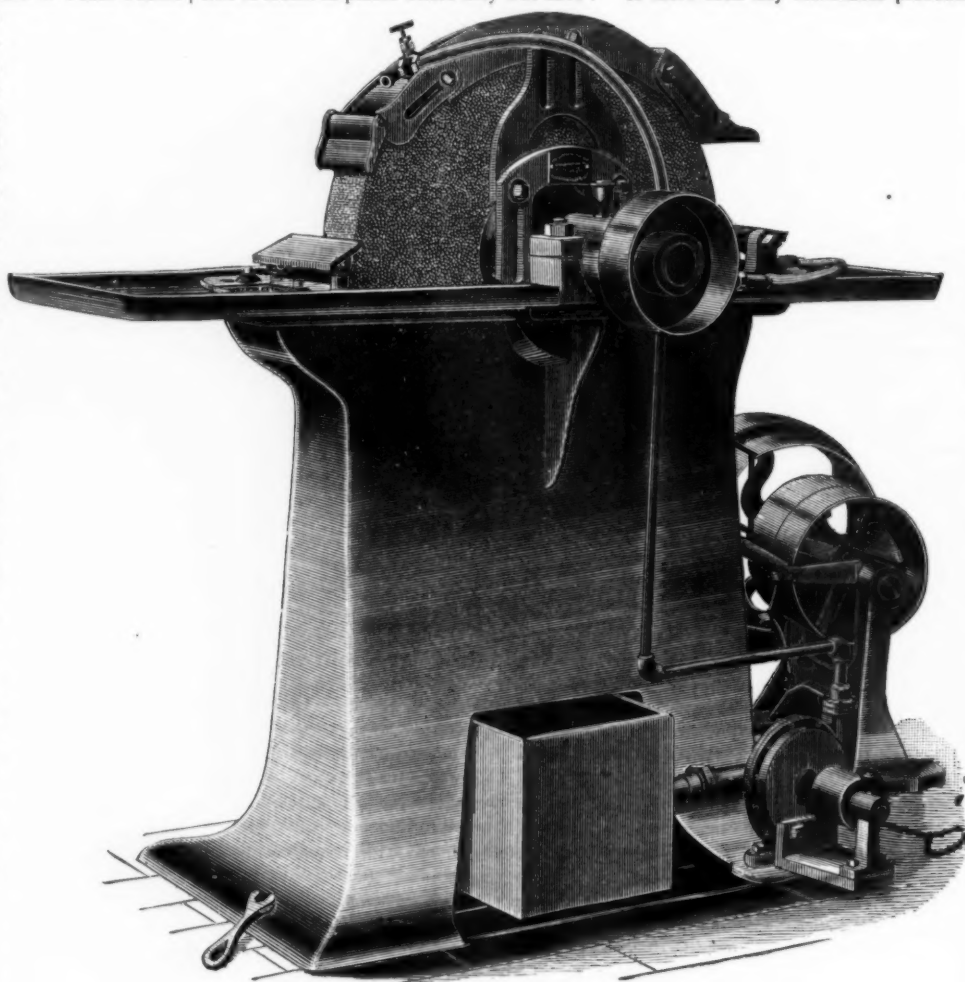
Emery-Wheel Tool Grinders.

The accompanying engravings illustrate two grinders, manufactured by Springfield Glue & Emery Wheel Co., of Springfield, Mass. Patented Sept. 25th, 1883. One is for grinding on the front side of the wheel, the other on both front and back sides, giving the claimants of front and back grinding a selection.

From a description in the American Machinist of Oct. 17th, we take the following: "This grinder is used for sharpening machinists' tools, the claim made for it being that it has many advantages over an ordinary grindstone. It occupies less space, the men stand near the wheel and so do better work. The grade or coarseness of grit and degree of hardness can be regulated and adapted to the kind of work to be done. The particles of stone composing the wheel are sharp-cut, and being five or six times harder than those of the ordinary grindstone, do so much more work. Thus a grindstone 3 feet in diameter, making 70 revolutions, gives 660 feet per minute of grinding surface, while an emery wheel 2 feet in diameter can safely make 550 revolutions, and so give 3,460 feet, or over five times the grinding surface per minute of harder, sharper and better cutting grit.

Thus a machinist averages half an hour daily at a grindstone; so in a shop with 20 men, ten hours per day are consumed sharpening tools, which, at 20 cents an hour, costs \$600 a year.

A good emery-wheel tool grinder will do the same work in less than half the time at a saving of over \$300 a year—more than



TOOL GRINDER.

the benefit of competition between the producers of their raw material. On this account I am inclined to think that there is room and a brilliant future here for one or two additional rolling mills. With competition in that line secured, there would be more inducements to other industries using finished iron, and these in turn would supply the rolling mills with a reliable home market. Capitalists who have an eye open to industrial chances in the New South might do worse than to give this some consideration.

STEEL FROM PHOSPHORUS ORES.

It has long been conceded that if a good article of steel—an article capable of successful testing against the Bessemer product—could be made from the Southern irons, which, as everybody knows, are high in phosphorus, the effect upon the fortunes of places like Birmingham would be something marvelous. As a matter of fact, the discovery of another Comstock lode, overlaid by a virgin Leadville in the immediate vicinity, would hardly seem a more golden

that the problem of turning the phosphorus ores of the New South into steel is to be solved affirmatively, thereby securing the future of a Pittsburg to Birmingham? On the strength of what experts, who have devoted years to that and like questions, have told me. I should say without hesitation that the desired solution is even now more than a probability. This is hardly the place for a disquisition upon the merits or the differing features of the several steel processes. The Bessemer is out of the question, as a matter of course. That is the Bessemer process, and I wish as much could be said of parties who control that process. If the Bessemer people did not own the Thomas-Gilchrist process, now and for some time past in litigation, the chances are that half a dozen large still plants would be going up here to-morrow. Your journal has given its readers the particulars of this, as well as of the Clapp-Griffith process; and it is only necessary to state that is also basic. By adding a change of dolomite lime at the proper time the iron is de-carbonized,

enough to pay for the machine the first year, even if the grindstone costs nothing.

The emery wheel in this machine is surrounded by a hood, except where the grinding is done, which prevents the water flying off, even at the high speed, and is adjustable to the wheel as it wears away. The front sec-



TOOL FOR TRUING WHEELS.

tion is provided with a pocket with holes through it, to distribute the water over the face of the wheel as it leaves the pipe. This pocket being open is easily cleaned of any dirt or rust that accumulates in the holes.

An iron tank is placed under the wheel to receive the water coming from it, and catch the waste ground off; the latter settles to the bottom out of the way, and can be readily cleaned out from time to time. Having this easy way of access is a very important feature. A centrifugal pump is connected with this water tank by a pipe taking the water midway between top and bottom of tank above the settlements, so the water is always comparatively clean; there is plenty of it, and the flow on the wheel is controlled by a valve to the desired amount.

Four sizes of this general design are manufactured, each using steel spindles from 2 3/4 to 1 1/2-inch diameter, with frame proportioned to the size of emery wheel used, as follows:

30x4 inches, 26x4 inches, 20x3 inches and 14x2 1/2 inches.

The small engraving represents a slide-rest and diamond tool made by this company for truing-up emery wheels. It is shown so clearly as to require no description."

Birmingham's Railroads.

[Special correspondence MANUFACTURERS' RECORD.]

BIRMINGHAM, ALA., October 13, 1885.

Three prominent railroad companies carry freight and passengers in and out of Birmingham daily: the Louisville & Nashville, Cincinnati, New Orleans & Texas Pacific, and the Georgia Pacific.

THE LOUISVILLE & NASHVILLE.

This staunch corporation own, lease and operate two thousand, three hundred and sixty-six miles of railroad. One line extends from Cincinnati to New Orleans; one from Louisville to Memphis; one from St. Louis, Mo., to Nashville; one from Louisville to Jellico; branches from Louisville to Lexington; from Louisville to Bardstown; Louisville to Bloomfield; Flomaton to Pensacola; Pensacola to River Junction, and several other branches and short divisions.

Many of the leading towns in the South and West are upon the line of this excellent railroad, and trains are run often enough to please the most exacting. The road bed, motive power, freight and passenger equipment are not excelled. Pullman palace sleeping and buffet cars run between all leading points, and every care is exercised for the benefit of the traveling public.

Here we have eight trains a day on this road; four north, four south; two through and two local.

The general offices are located in Louisville. M. H. Smith, president; Rueben Wells, general manager and C. P. Atmore, general passenger agent.

THE CINCINNATI, NEW ORLEANS & TEXAS PACIFIC.

Better known, perhaps, as the "Queen & Crescent Route." This company own, lease and operate one thousand, one hundred and fifty-three miles of railroad. The Queen & Crescent is composed of the following roads: Cincinnati Southern, Cincinnati to Chattanooga; Alabama Great Southern, Chattanooga to Meridian; New Orleans & North Eastern, Meridian to New Orleans; Vicksburg & Meridian, Meridian to Vicksburg; and the Vicksburg, Shreveport & Pacific, Vicksburg to Shreveport.

Solid trains, with Mann boudoir cars, first and second-class coaches, are run between Cincinnati and New Orleans. The road bed is smooth, and the running equipment equal to the best.

The general offices of the company are in Cincinnati. Frank S. Bond, president; John C. Gault, general manager; and H. Collbran, general passenger agent.

THE GEORGIA PACIFIC.

Three hundred and thirteen miles are

Ring vs. Mule Spinning.

Whatever is said for or against ring spinning, it must be evident and acknowledged that the system is destined to play a very important part in the cotton industry, not only of this, but other countries. By other countries is to be understood other than America, where it is already well known that ring spinning, so far as spinning on bobbins is concerned, has been brought to its present state of perfection; and the existing crisis in the cotton trade of Oldham, Bolton and other towns (which are the main seats agitated at present by strikes, and threatened strikes, of the mule minders), has undoubtedly, and very deservedly so, brought this important question of ring spinning very much to the front. Discussion (and a desire for information) in reference to this important matter is now the general theme. Undoubtedly the strike of mule minders has opened the field for such discussions, and will no doubt lead many people to look about for themselves, and see if some means cannot be found (if it is not already

in any other way than in the bundles or hanks; whereas, if the frame could be made and adapted to spin cops similar in weight and shape to those of the mule (and without wooden bobbins or pirns) on the bare spindle, even if with a small paper to facilitate skewering and shuttling similar to those known in the trade as "export tubes," and such as are already very extensively used by many mule spinners, it would undoubtedly lead to a kind of revolution in the cotton-spinning industry, and spinners would then be able either to bundle or sell in the cop, packed in the ordinary skips used in the mule-spinning trade. The small tubes used will pay for themselves over and over again, in simply saving cop bottom waste, which must be enormous, considering the large amount of such cop bottom waste bought weekly.

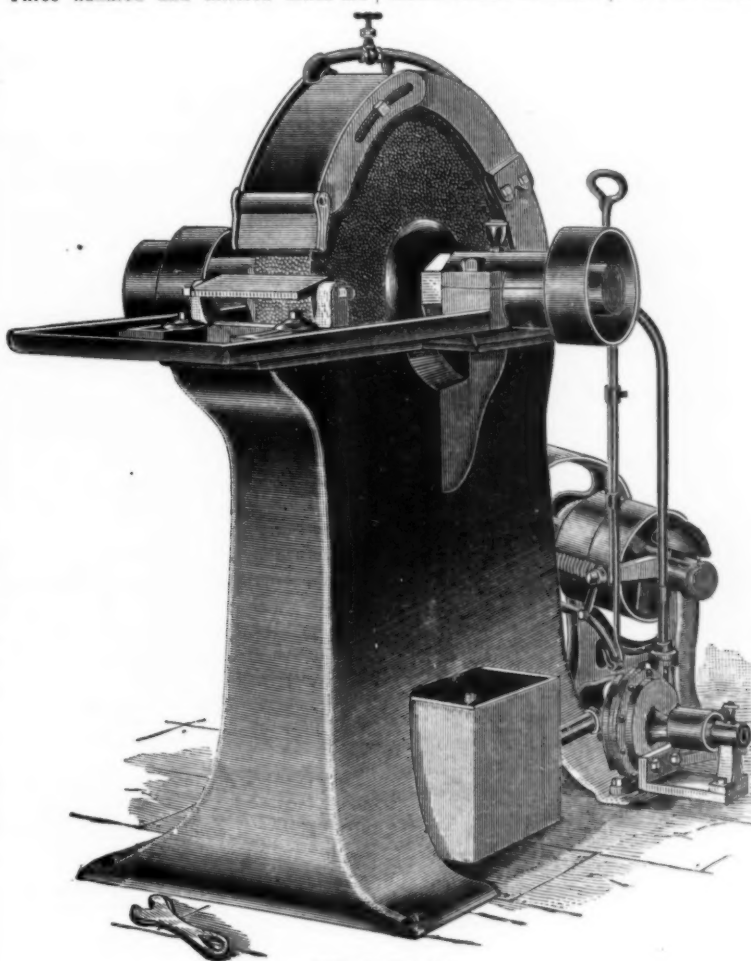
Now, in trying to bring such machines to the notice of spinners, there have been many attempts in the past, but unsuccessfully. From what, however, is heard, one of the principal cotton spinners in Oldham, and one of the most prominent townsmen, well known for his energy and perseverance, has recently purchased and put to work in his mill, such a machine, and it is stated that his new machine promises exceedingly great things. The cops are in shape and form exactly like those produced on the mule, and if the success of this machine is insured, about which there appears very little doubt, it will supply one of the greatest wants of the time, enhancing the value considerably of both old and new mill property, particularly the former, and it behooves those who are wishful (and all should be) to encourage and see that such a most desirable end be obtained, which would lead to, and be of such practical benefit. The frame is exceedingly simple—a very desirable attribute for making a success.

The ordinary method of spinning in the present ring frame has taken years to attain its present position as an important factor in the cotton-spinning trade; but now that ring spinning is more widely known, and better understood by operatives and overlookers, it cannot be a very serious matter, or one on which very much time is requisite, to bring the new machine spoken of, which is of the ring principle, into full operation and general favor. Such a machine is certainly wanted; and the machine, which is of recent invention, and now being introduced, from what is gathered, appears destined not only to fill up this want, but to be of very great and important benefit to the cotton-spinning trade generally.

As to the comparison of yarn produced on this new machine and that of the mule, it is not necessary to enter into at present. The yarn is pronounced of good quality, but this is a matter that will be taken and rectified if it is requisite, and seen to by practical spinners and the managers, and made suitable to the requirements and exigencies of the trade. All that is desired at present is to draw the attention of persons interested to the fact that such a machine is in the market, and Oldham and other cotton spinning districts should not be slow to take advantage of its good qualities, which, it is hoped, will be to the benefit not only of the great seat of cotton spinning, but to other localities also. —Oldham Chronicle.

OUR Mountain Home, of Talladega, Ala., has gotten out a special issue, in which the resources and attractions of Talladega and the surrounding country are set forth.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the BALTIMORE MANUFACTURERS' RECORD. We are always prepared to furnish proof of our claims as to circulation.



EMERY GRINDER.

owned and operated by this company, as follows: Atlanta, Ga., to Coalburg, Ala., 177 miles; Cane Creek, Ala., to Columbus, Miss., 76 miles; Greenville, Miss., to Johnsonville, Miss., 30 miles; and a branch, Stoneville to Sharkey, 22 miles. There are 8 miles of branches in and around Atlanta and Birmingham.

Coalburg is just 10 miles from Birmingham, but the main line is down on the fold and in the "Official Guide" as Atlanta to Birmingham, 167 miles.

It is the intention of the company to build the road through from Atlanta to Columbus, which is about 293 miles via their survey. Forty miles of this are yet to be built—between Coalburg and Cane Creek. So that, at present, the road is built 10 miles west of Birmingham and 76 east of Columbus.

The road bed is fine between Atlanta and Birmingham, the fast train making the run—167 miles—in just five and one-half hours. This run is in daylight, and a delightful one.

The general offices are in Birmingham. John W. Johnston, president; I. V. Sage, general superintendent and L. S. Brown, general passenger agent.

produced, from what one sees and hears) by which cops similar in make and build which will answer the same purpose as those hitherto only made by means of such a complicated (although one must own such a beautiful) piece of mechanism as the mule. It certainly does appear, in this advanced age of scientific discoveries, that some simpler method ought and must be brought about to produce similar cops by a much simpler piece of mechanism than the mule. However much the beautiful construction of the mule is admired, one is compelled to admit that it seems a roundabout way to produce that simple article called a cop. Of course, people are aware that spinning on the ordinary ring frame only partially approaches this millennium for cotton spinners, there being certainly a very great and serious drawback to the ordinary ring frame—that being the necessity of using wooden bobbins or pirns, and the very fact of having to use these wooden bobbins or small spools, restricts and confines the spinners using such machines to one branch of trade, which is in itself a very serious matter, on account of the spinner being unable to sell his yarn,

Chattanooga Iron Market.

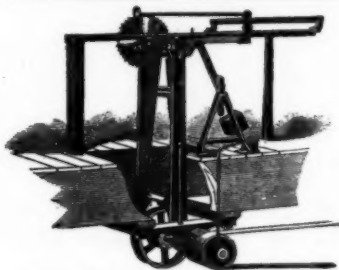
Specially reported by LOWE & TUCKER, Brokers and Commission.

CHATTANOOGA, TENN., Oct. 12, 1885.

We have nothing new to note beyond a gradual and universal revival of business all through the Southern States. The general rains have damaged the cotton crops all over the State, and in some localities where the lands have been overflowed, the loss has been severe, but the return of bright skies and cool weather brings the assurance that the losses have not been as great as was at first anticipated. Foundry irons are scarce and hard to get and command outside quotations. We quote:

No. 1 Foundry.....	\$14 50	\$15 50
No. 2 Foundry.....	13 50	14 50
American Scotch.....	13 50	14 00
Gray Forge.....	12 00	13 00
Car-Wheel Iron.....	22 00	24 00
Ores, Red and Brown.....	1 50	2 25
Furnace Coke.....	2 00	2 50
Nails, car-load lots, 30 days.....	—	2 35
Bar Iron, per 100 lb.....	—	1 05
Old Rails.....	—	16 00
Old Wheels.....	—	13 00
Wrought Scrap, No. 1.....	—	55
No. 2.....	—	40
Cotton Tie Clippings.....	—	—
Cast Scrap.....	—	—
Railroad Spikes.....	—	1 65
Railroad spikes.....	—	1 80
Light Steel Rails, long ton.....	40 00	47 00
Harb wire—Cambria link.....	5	5 1/2
Barbed wire—four point galvanized.....	—	—
Barb ware.....	—	—

In our advertising columns will be found the card of the Tryon Hotel, of Tryon City, N. C. Tryon City itself is a small town or village located well up in the mountains of Western Carolina, a section widely known for its great healthfulness, and where the climate is especially beneficial in throat and lung troubles. Tryon, in addition to the advantages enjoyed by the whole of Western Carolina, possesses the additional advantage, and a very important one it is, of being located in the "Thermal Belt," where the winter climate is much milder than in other places of the same region and is even warmer than at points considerably farther south. Owing to the high altitude of the mountain ranges to the North and West of it, Tryon is sheltered from the Northern cold and is said to enjoy a delightful winter climate. Certain it is that experience has demonstrated its exceptional advantages as a health resort. For those contemplating spending the winter South on account of health, or who desire to escape the rigors of a Northern winter, Tryon City offers some inviting attractions. Mr. E. J. Harrison, the proprietor of the Tryon Hotel, will furnish any information desired regarding the place.



New Swing Cross Cut Saw,

with rigid iron frame and steel arbor. The frame is mounted on a heavy iron base, bolted to the joist under the floor. **Saw Mill Mandrels, Saw Machinery,** and all sizes of Saw Arbors.

R. M. McBETH & CO.

185 Pearl Street, Cincinnati, Ohio.

BOOMER & BOSCHERT.

LARD AND



TALLOW PRESSES.

— ALSO PRESSES FOR —

Cotton, Woolen and Paper Factories,

— ALSO —

Cotton Seed, Paraffine and Castor Oils.

Send for Circulars.

BOOMER & BOSCHERT PRESS CO.

SYRACUSE, N. Y.



Trade: Send for cuts: Gratis.
Send for circulars: Gratis.
Send 50 cents for Book of Rules.

THE LICOWSKY
Clay Pigeon Co.

Box 1,292,
Cincinnati, Ohio.

HUGH SISSON & SONS,

140 W. Baltimore St., Baltimore,

MANUFACTURERS OF

Marble Monuments

Tombs, Altars, Counters,
Furniture Slabs, Mantels, Tiles.

Estimates and Drawings Free.

DAVID RICE

Atlanta, Ga.

Machine * Tools

AND

Railroad Shop Equipments

MINING TOOLS, &c.

Southern Agent Rand Drill Co., Diamond
Emery Wheel and Machine Co.,
L. B. Flanders Machine Co.,
Hazard Mfg. Co.

Derby Roll Top AND Flat Top Desks

The BEST and CONSEQUENTLY the CHEAPEST
OFFICE DESK IN THE WORLD.

Derby & Kilmer Desk Co.,

Manufacturers.

OFFICE AND WAREHOUSES:

55 to 65 Charlestown St.,
BOSTON, MASS.



100,000 READERS!

ESTABLISHED IN 1839.

THE

LEADING IN 1885.

The most reliable and popular Journal of its kind in the South. Farmers everywhere endorse it.

Southern Cultivator
AND DIXIE FARMER.

It goes to every portion of the South and Southwest. It is a first-class advertising medium.

ATLANTA, GEORGIA.

The Recognized Organ of Southern Agriculture and Industrial Progress of the South. Farmers, Lawyers and Business Men Read it.

PRESS AND PEOPLE ENDORSE WHAT ADVERTISERS SAY.

"We have been astonished at the wide range from which inquiries have come to us, referring to the advertisement of our Blue Grass Sulky Plow in THE SOUTHERN CULTIVATOR. Letters have come to us from all the Southern States, from the Carolinas round to Texas. We could not have had a better proof of the extent of your circulation. Let us know what your charge is to be for three months' insertion of the advertisement. How much for four months? We shall hope to run other of our improved implements for cotton culture in your columns, if results from present 'ad.' are as encouraging. Truly, etc., THOS. MEIKLE & Co., Louisville, Ky."

"CULTIVATOR PUBLISHING CO., ATLANTA, GA.—An infringement on our machine having appeared, it is necessary to change my advertisement in THE CULTIVATOR. Enclosed please find copy, which insert in place of the one now appearing. I can say that I do not believe that there is an advertising medium in the South that could accomplish the same result for its patrons in five insertions that THE CULTIVATOR will in one. With many thanks for your many kindnesses to me, I am, very truly, GEO. T. BELTON, Gen. Agent Taylor & Cox Steam Fire Extinguisher Co., Belton, S. C."

THE SOUTHERN CULTIVATOR is the oldest and now the handsomest Agricultural Journal in the South. By recent purchases it combines "The Dixie Farmer," Atlanta, Ga.; "The Plantation," Montgomery, Ala.; "The Rural Sun," Nashville, Tenn.; "The Southern Farmer's Monthly," Savannah, Ga., and unites the patrons of those with its own large list of subscribers.

STILL ANOTHER. AS AN ADVERTISING MEDIUM.

Since the receipt of the above from Thos. Meikle & Co., we are in receipt of another under date of August 3d. "Our advertisement in THE SOUTHERN CULTIVATOR is bearing abundant fruit, and we enclose you a letter from Kelleyville, Texas, as a sample of the many we are receiving due to THE CULTIVATOR. As the writer of the letter is unknown to us, and his communication unsolicited, it carries the greater weight."

AS AN EDUCATOR.

Since becoming familiar with your Magazine, we are more and more struck with its merits as an educator for the Southern planting interest and medium of communicating with the same. We know of no Agricultural Journal that combines so much sound scientific information with so much practical good sense. THOS. MEIKLE & Co., Louisville, Ky.

Sample Copies Free.

JAS. P. HARRISON, Business Manager,
ATLANTA, GA.

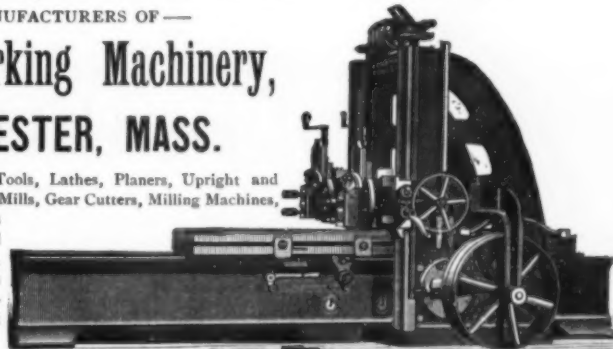
POND MACHINE TOOL CO.

Successors to DAVID W. POND,

— MANUFACTURERS OF —

Iron Working Machinery,
WORCESTER, MASS.

Special Railroad Tools, Lathes, Planers, Upright and Radial Drills, Boring Mills, Gear Cutters, Milling Machines, Patent shafting Lathes Hand Punches and Shears, Planer Chucks. Special machinery in great variety. Estimates furnished. Send for catalogue.



ALWAYS ASK FOR

ESTERBROOK'S
CELEBRATED
STEEL PENS.

PENS

LEADING NUMBERS:

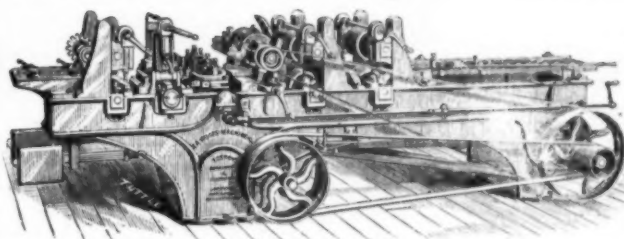
048, 14, 130, 333, 135, 161

For Sale by all Stationers.

The Esterbrook Steel Pen Co.

26 John Street, New York

Wood-Working * Machinery



FOR
Railroad Shops,
Planing Mills,
Car Builders,
Cabinet, Carriage,
Sash, Door
Blind Makers.

We received eight First-Class GOLD MEDALS at the World's Exposition, at New Orleans, La., on our Machinery, awarded by an Experienced and Practical Committee.

GOLD MEDAL for best Fast-Feed Flooring Machine.

GOLD MEDAL for best Molding Machine.

GOLD MEDAL for best Endless Bed Double Surfer.

GOLD MEDAL for best Jointing Machine.

GOLD MEDAL for best Circular Saw Machine.

GOLD MEDAL for best Planing Machine for Matching two Boards at a Time.

GOLD MEDAL for best Panel Planer.

GOLD MEDAL for best Shop Surfer. Illustrated Catalogues on Application.

S. A. WOODS MACHINE CO.

WAREHOUSES:

91 LIBERTY STREET, 172 HIGH STREET, 61 S. CANAL STREET
New York. Boston. Chicago.

PARKER GAS AND ENGINE.

Guaranteed to Run with Less Gas than Any Other Gas Engine Known.

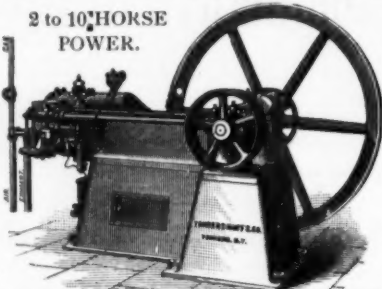
Always Ready
to Start.

Lighted by Electric
Spark.

Simple.

Durable.

Effective.



No Boiler.

No Coal.

No Ashes to
be Removed.

No Chimney.

No Engineer.

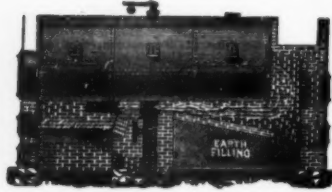
No Smoke.

No Smell.

No Slide Valve to Get Out of Order. Does Not Hazard Insurance.
No Small Parts to Clog Up. Is Noiseless in Running.
Requires no Matches to Ignite the Gas. Can be Run with Any Kind of Gas.
It is the only Engine that can be run equally as well with Gasoline Gas or Carburetted Air, as with regular fixed gas. Speed can be adjusted while running from 80 to 200 revolutions per minute.

YONKERS MFG. CO. Salesroom, 16 Dey St., New York.
SEND FOR ILLUSTRATED CIRCULAR AND PRICE-LIST.

JARVIS PATENT FURNACE FOR SETTING STEAM BOILERS.



Economy of Fuel, with increased capacity of Steam Power. Like the Siemens Process of Making Steel, it utilizes the waste gases with hot air on top of the fire. Will burn all kinds of waste fuel without a blast, including Black Coal, Sawdust, Logwood Chips, &c. Send for Circulars.

Jarvis Engineering Co.,

A. F. UPTON, Treas. and Gen'l Manager,
61 Oliver St., Boston, Mass.

JOSHUA C. COE, Agent for Maryland and Virginia,
O'Donald's Wharf, Baltimore, Md.

SOUTHERN REFERENCES:

Eagle & Phenix Mfg. Company, Columbus, Ga.
Anniston Mfg. Co., Anniston Ala.
J. P. King Mfg. Co., Augusta, Ga.
Rose Mining Co., Charleston, S. C.
Maryland Pavement Co., Baltimore, Md.
Brush Electric Light Co., Baltimore, Md.
Ettrick, Matocca and Battersea Mfg. Co's.,
Petersburg, Va.
Rasin Fertilizing Co., Baltimore, Md.
Tanner & Delaney Engine Co., Richmond, Va.
Sibley Mills, Augusta, Ga.

Graniteville Mfg. Co., Graniteville, S. C.
Charleston Bagging Co., Charleston, S. C.
P. H. Mayo & Bros., Richmond, Va.
Phosphate Mining Co., Beaufort, S. C.
Brush Swan Electric Light Co., Norfolk, Va.
Columbus Ice & Refrigerator Co., Colum-
bus, Ga.
Lenoir Manufacturing Co., Lenoir, East
Tennessee.
Vandœuvre Mill, Graniteville, S. C.

PHOSPHOR-BRONZE

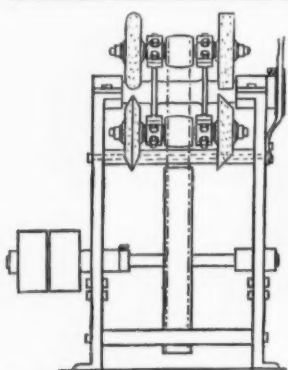


The celebrated alloys in Wire, Rods, Sheets, Bolts,
Wire Ropes, Wire Cloth, Castings, Ingots, etc.
Pamphlets and particulars on application to

THE PHOSPHOR-BRONZE SMELTING CO., Limited.

No. 512 ARCH STREET, PHILADELPHIA, PA.

Owners of the U. S. Phosphor-Bronze Patents.
Sole Manufacturers of Phosphor-Bronze in the United States.



BLAISDELL'S
Eight Wheel Emery Machine,
FOR GRINDING

ALL KINDS OF IRREGULAR CUTTERS.



J. H. BLAISDELL, Manufacturer of WOOD-WORKING MACHINERY.

SPECIAL ATTENTION GIVEN TO REPAIRING.

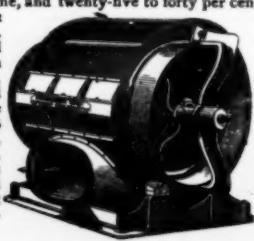
Office and Factory, 550 & 552 W. 25th Street, New York.

THE MACKENZIE PATENT CUPOLA AND BLOWER

Send for Circular to SMITH & SATRE MFG. CO., Proprietors, 245 Broadway, N. Y.



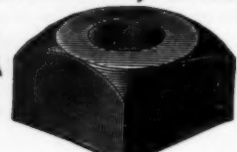
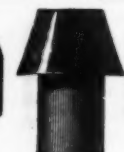
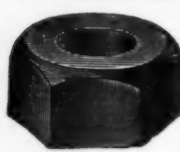
This Cupola has made a great revolution in melting Iron. It differs from all others in having a CONTINUOUS TUYERE, or in other words, the blast enters the fuel at all points. Above one ton capacity per hour, they are made oval in form. This brings the blast to the center of the furnace with the least resistance and smallest possible amount of power, and in combination with the continuous Tuyere causes complete diffusion of the air throughout the furnace, and uniform temperature, melting ten or fifteen tons an hour with the pressure of blast required to melt two or three tons in an ordinary Cupola. It also enables us to save very largely in time and fuel, the experience of our customers showing a gain of twenty-five to fifty per cent. in time, and twenty-five to forty per cent. fuel over the ordinary Cupola, and a BETTER QUALITY OF CASTING, especially in light work. This is due to the thorough diffusion of the air and more perfect combustion, extracting less carbon from the iron, making a softer and tougher casting. We manufacture these Cupolas of any desired capacity, numbered from 1 to 20, inclusive, the numbers indicating the melting capacities in TONS PER HOUR—No. 1, one ton; No. 2, two tons; No. 3, three tons per hour, and so on up to 20, or 25 tons. We have improved the construction of these Cupolas in every way, have increased their strength and durability, and sought to make them as convenient for working and repairs as our own and the experience of our customers could suggest.



MOOPES & TOWNSEND,

MANUFACTURERS,

PHILADELPHIA, PA.



KEYSTONE BOILER RIVETS.

Cold-Punched Square and Hexagon Nuts.

Finished and Case-Hardened Steel Hexagon Nuts.

BRIDGE RODS AND RIVETS.

BUILDERS' IRON WORK.

TANK AND COOPERS' RIVETS.

THE Stockport Gas Engine **UNEQUALLED**

FOR

Simplicity,

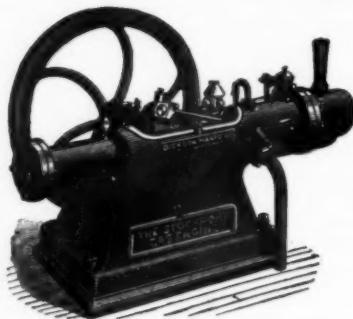
Durability,

Reliability,

Economy,

Lightness, and

General Design.



Starts with Ease.

Receives an Impulse
at every revolution.

Runs Silently.

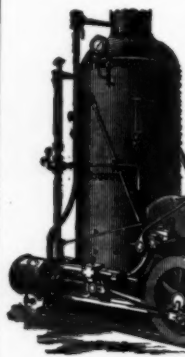
At a regular speed
with the least at-
tention.

THE DICKSON MANFG. CO.

Locomotives, Stationary Engines, Boilers, Mining Machinery,

SCRANTON, PA., and 112 LIBERTY ST., NEW YORK.

Send for Circular, giving particulars of sizes and prices.



IMPROVED HOISTING ENGINES,

MANUFACTURED BY THE

LIDGERWOOD MFG. CO.,

Offices and Salesrooms: 96 Liberty St., New York.

MORTON, REED & CO., Agents,

59 and 61 German St., Baltimore.

Specially adapt-
ed for Railroad
and Contractors'
uses, Pile-driving,
Bridge and Dock
Building, Excav-
ating, etc. Single
or double cylin-
ders, with single
or double improv-
ed friction drums,
with or without
Boilers.



SMITH, MYERS & SCHNIER,

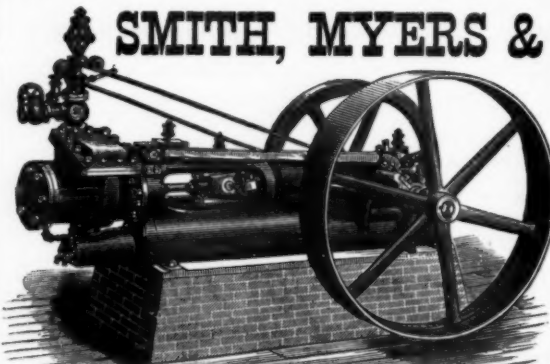
402 to 412 W. Front Street,
CINCINNATI, O.

MANUFACTURERS OF

PATENT TERRAPIN
CENTRE CRANK
ENGINES,

from 15 to 200 Horse Power.
BOILERS AND
SAW MILL MACHINERY.

Send for illustrated Catalogue
and prices.



CHATTANOOGA FOUNDRY & PIPE WORKS.

D. GILES, Prest. C. B. IBESTER, Vice-Prest. M. LLEWELLYN, Secy. GEO. E. DOWNING, Treas.

Successors to D. GILES & CO., Chattanooga, Tenn., Manufacturers of



Also Castings and Pat-
terns of Every Descrip-
tion made to order.

GET THE BEST.



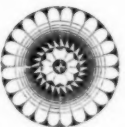
A Good Water Wheel Increases
the Value of Your
Whole Plant.

GET THE BEST AT FIRST AND AVOID THE
EXPENSE AND DELAY OF CHANGING
THE WHEELS.

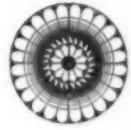
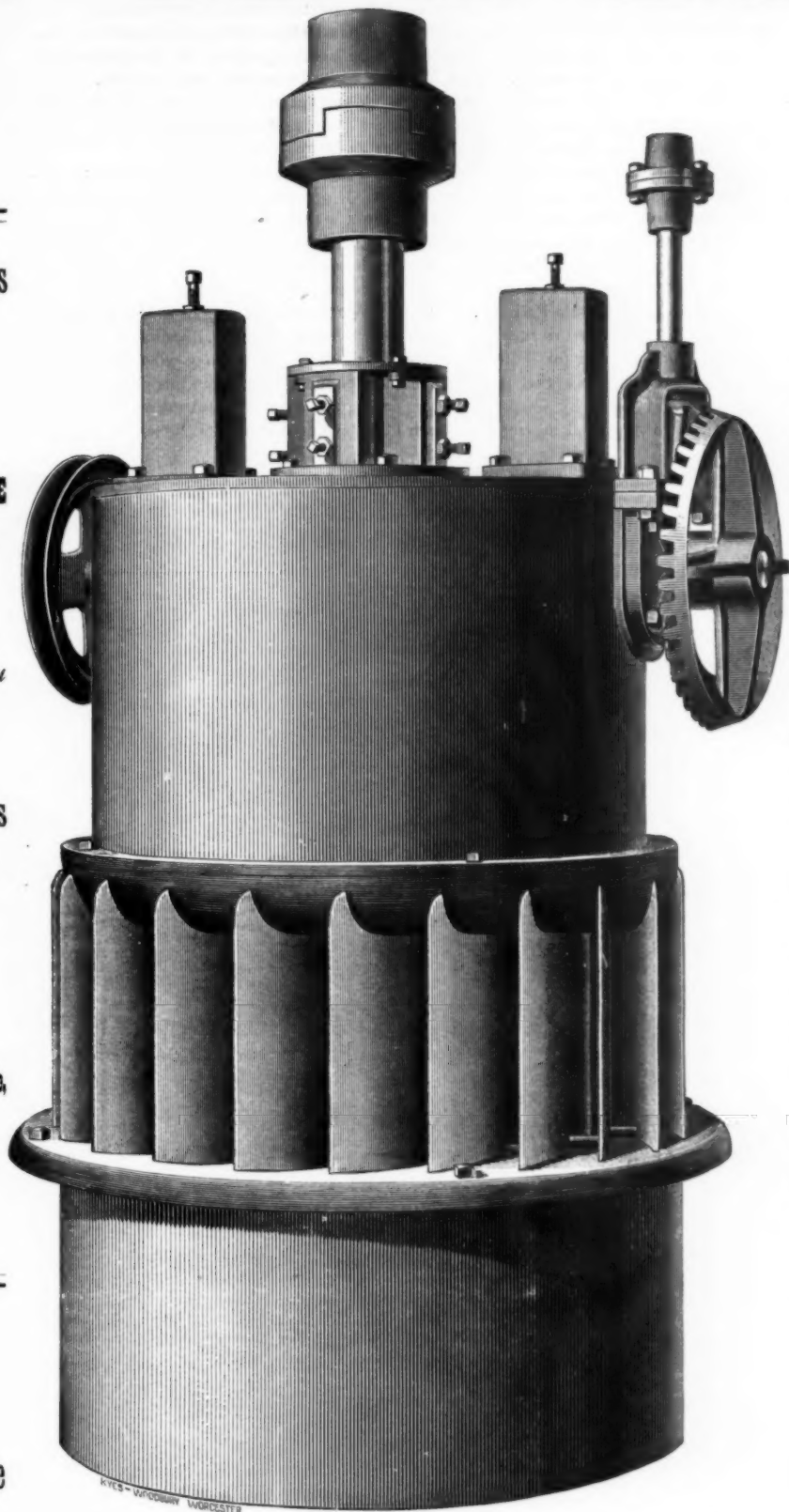
A Good Wheel Will Serve You
Well for Twenty Years.

THE BEST IS THE CHEAPEST. IT DOES
MORE WORK, LASTS LONGER, AND
COSTS NO MORE FOR GEARS
AND SETTING THAN A
COMMON WHEEL.

The Hercules Gives the Most Power for its Size,
and the Highest Average Percentage
from Full to One-Half Gate of
any Wheel Ever Made.



Below we give the Names of the



When it is considered that
the HOLYOKE WATER
POWER COMPANY test
every wheel that is put in in
Holyoke, and use the wheels
as a gauge or meter for mea-
suring the water to the
manufacturers and charge
them for the actual quantity
of water used, it will be seen
that the HERCULES stands
first in the estimation of
Holyoke manufacturers as an
economical wheel in the use
of water for the amount of
power produced. The HER-
CULES, we believe, is the
only wheel of which all the
sizes, both right and left hand,
have been tested, some of
them many times, and all
brought to the standard of
excellence which has been
set by the makers and de-
manded by their customers.



Mills in Holyoke, Mass., using

THE HERCULES WATER WHEELS

THE HEAD OF WATER ON THE WHEELS AND THE POWER FURNISHED BY THE HOLYOKE WATER POWER CO.:

	Diam. in inches.	Head on Wheels.	Horse Power.	Date of Setting.		Diam. in inches.	Head on Wheels.	Horse Power.	Date of Setting.		Diam. in inches.	Head on Wheels.	Horse Power.	Date of Setting.
Albion Paper Company.....	39	25	255	1878	Geo. R. Dickinson Paper Company...	36	19	170	1883	The Massasoit Paper Company.....	39	19	197	1883
Albion Paper Company.....	24	25	115	1883	Holyoke Water Power Company.....	30	19	115	1882	Union Paper Company.....	45	20	285	1882
Albion Paper Company.....	45	27	445	1880	Holyoke Warp Company.....	48	11	130	1879	Union Paper Company.....	30	20	125	1882
Albion Paper Company.....	30	27	200	1883	Massachusetts Screw Company.....	27	19	90	1882	Valley Paper Company.....	42	27	390	1882
Chemical Paper Company.....	4-30	23	620	1880	Merrick Thread Company.....	48	12	150	1880	Wauregan Paper Company.....	42	18	210	1879
Chemical Paper Company.....	5-18	23	275	1880	Newton Paper Company.....	48	21	350	1880	Wauregan Paper Company.....	33	18	130	1882
Chemical Paper Company.....	33	23	185	1880	Nonotuck Paper Company.....	48	20	570	1881	Whiting Paper Company.....	27	18	85	1882
Chemical Paper Company.....	42	23	305	1880	Nonotuck Paper Company.....	27	29	175	1881	Whiting Paper Company.....	16	15	30	1880
Chemical Paper Company.....	2-48	23	800	1880	Riverside Paper Company.....	48	20	325	1880	Winona Paper Company.....	48	28	540	1880
Connecticut River Pulp Company....	36	18	155	1881	Syms & Dudley Paper Company.....	45	20	495	1881	Winona Paper Company.....	24	28	135	1880
Crocker Paper Company.....	39	25	300	1883	Syms & Dudley Paper Company.....	24	20	140	1881					
Farr Alpaca Company.....	48	19	300	1878	Springfield Blanket Company.....	36	18	155	1877					
Franklin Paper Company.....	39	20	215	1883	The Beebe & Holbrook Paper Co.....	24	19	75	1884					
Geo. R. Dickinson Paper Company....	2-45	19	520	1883										
									</					

Increase since..... 9,797
Total..... 10,576

Send for
Catalogue
No. 3.

HOLYOKE MACHINE COMPANY, Worcester, Mass.

Valuable Iron Furnace Property in Virginia.

The Buffalo Gap Iron Furnace property in Virginia is located in the Valley of Virginia, immediately on the Chesapeake & Ohio Railroad. It contains some 2,700 acres, mostly rolling mountain timber land, though there are 400 acres in a high state of cultivation, suitable for wheat, corn, oats, &c., and a portion of it is well set in grass. At Staunton, 10 miles east of this property, rail connection is made to Washington and all points North and East. At Huntington, W. Va., connection is made to all points West and Southwest, and cheap transportation can be had on the Ohio river to all landings and its tributaries. Deep water connection is secured at Newport's News, Va., by the Chesapeake & Ohio.

Improvements.—These consist of two furnaces—No. 1, of 45 feet stack and 11 feet bosh; No. 2, of 57 feet stack and 9 feet bosh, with a capacity for 35 tons pig iron per day,

it is inexhaustible, and would warrant the construction of furnaces of much larger capacity, in order to reach a larger product than the present 35 tons per day. The ore is principally brown hematite, containing a large percentage of oxide of manganese, as per accompanying analysis, which causes the product to be of especially great utility for the manufacture of car wheels. When the furnaces were in full operation some few years ago, the product was sold exclusively in Baltimore to the Baltimore & Ohio Railroad Co. for the manufacture of car wheels, and to the Abbott Iron Co., who used it for boiler sheet iron, giving great satisfaction to both consumers, with the only regret that the output could not be much larger. The fuel used at that time was splint coal, obtained on the Chesapeake & Ohio Railroad, and the product produced from this fuel sold within a fraction of that paid for Baltimore charcoal iron, and brought at that time \$54 per long ton.

Coal.—A strong coal measure has been

on this property, as previously mentioned, with the following results:

Iron Ore.—Silica, 1.08 per cent.; oxide of manganese, 22 per cent.; oxide of iron, 74.12 per cent.—equal to 54.4 per cent. metallic iron; phosphorus, 0.62 per cent.

Fossil Ore.—Silica, 72.84 per cent.; metallic iron, 11.34 per cent.; manganese, 2.30 per cent.; phosphorus, 0.28 per cent.

Manganese.—Silica and clay, 26.5 per cent.; oxide of manganese, 68.3 per cent.; oxide of iron, 3.1 per cent.

Limestone.—Silica, 3.40 per cent.; alumina, 1 per cent.; protoxide iron, 0.60 per cent.; manganese, 1.71 per cent.; lime, 50.34 per cent.—equal to 89.40 per cent. carbonate of lime; carbonic acid, 41.85 per cent.; loss and waste, 1.10 per cent.

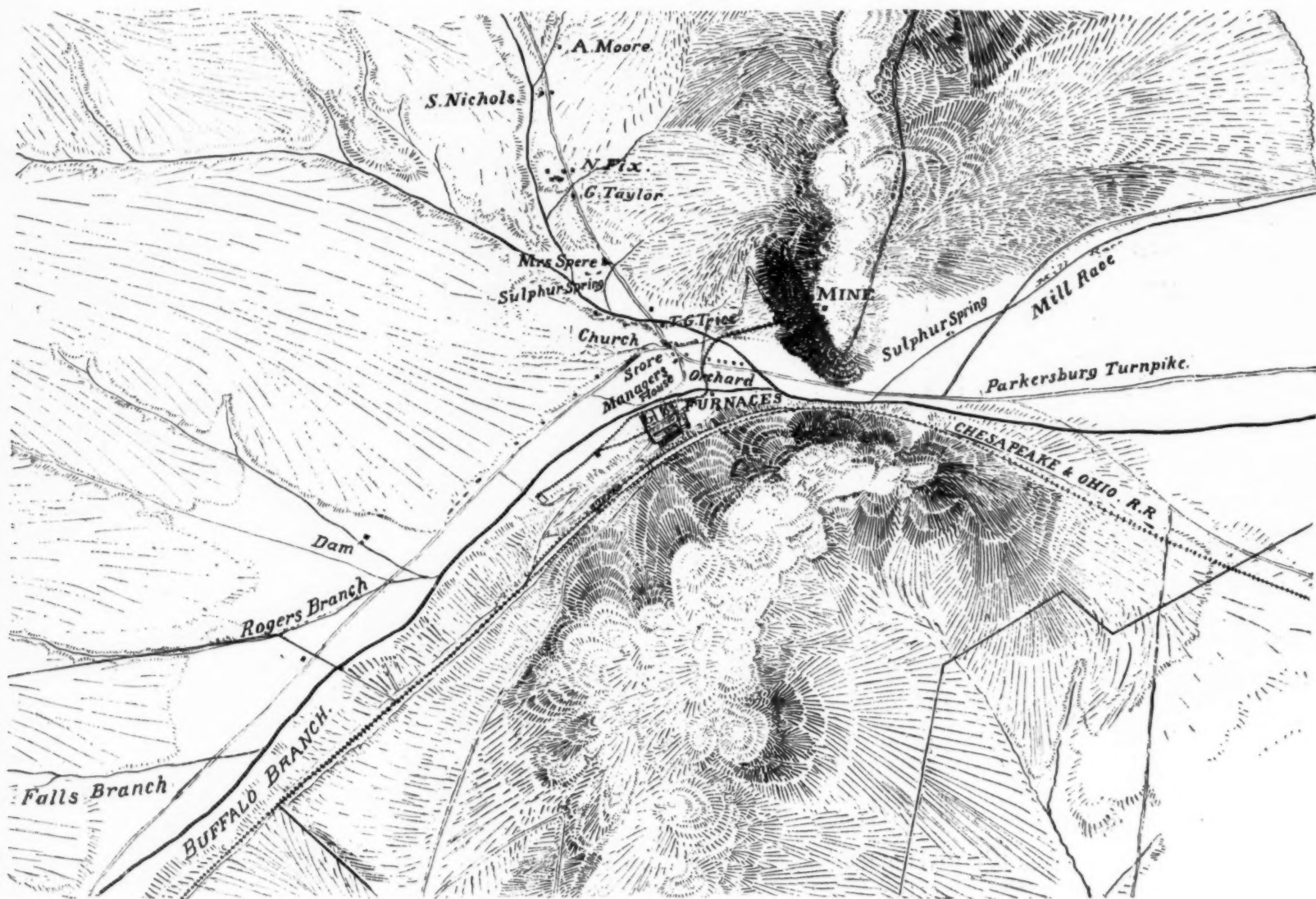
Work and Strength of Iron Test.—Prof. N. H. Thurston, director of Stephens Institute of Technology, who has made a test of the pig iron from this property by his autographic revolving testing machine, shows the tests by tensions of "breaking load per

on this property at as low a cost as anywhere in the United States, and the product, especially in Baltimore where it is known, could be sold at higher prices than a common quality which has no established reputation.

Title.—The title is perfect and undisputed, and guaranteed by warranty.

General Remarks.—The owners of this property, not being practical iron men, engaged in other business pursuits, have decided to sell. Although over \$250,000 has been expended on the property, they now offer the same for a little more than one-half, and in the hands of practical iron men, with proper management, there is not a property in any iron region which would yield better results, and a close and thorough examination will fully substantiate all that has been said.

With inexhaustible quantities of a high-grade iron ore, manganese, pure limestone, fossil ore, and a sufficiency of timber for charcoal to run the furnaces with its present capacity for at least ten years, and with a



THE BUFFALO GAP IRON FURNACE PROPERTY.

which, with a small outlay, could be placed in a full working condition in a very short time. There are some 30 houses for employes, a resident manager's house, flour and saw mill, storehouse for merchandising, farm and outhouses, engine houses, with engines for hoisting ores. In all, the whole equipments on the property for facilitating work cannot be excelled. The location is especially attractive for carrying on merchandising on the property at its own railroad station, in connection with the flour mill, which has a capacity of 20 barrels per day. There is a fine bearing orchard on the property, and a very strong sulphur and alum spring, both of which are celebrated in that section for their great medicinal properties.

Iron Ore.—The vast ore deposits on this property have never been sufficiently developed. Only about 6,000 tons have been taken out, and this has not been done in a systematic and economical method; but enough is in sight to convince experts that

discovered on the property, giving indications that, with a small outlay, sufficient coal can be mined for furnace purposes.

Limestone.—Limestone in inexhaustible quantities is easy of access to the furnace on the property, and its actual cost of fluxing is merely nominal.

Oxide of Manganese.—A very extensive vein of this mineral runs alongside of the iron ore, and could be made by proper manipulation very valuable, both in the use as flux for steel or be sold as a chemical mineral.

Iron Paint.—A large deposit of valuable iron paint is on this property, and practical tests on railroad bridges have established its usefulness as a great wood preserver.

Analysis.—The following analyses were made at the Stephens Institute, Hoboken, N. J., and at the Columbia University, District of Columbia, of the various minerals

square inch to be 29,003 pounds," and stresses in torsion foot pounds 160. Stresses in tension approximate pounds per square inch, 32,000 pounds. Under this strain the bar shows an extension of nine ten-thousandths parts of its length, and the homogeneousness as to structure and strain is excellent, and Prof. Thurston especially recommends this iron for car wheels and for any machinery castings where great toughness, strength and shock resistance are required.

Water Facilities.—The facilities for a water supply to carry on the present furnace operation or for future extension are in abundance, as the water is now brought direct to the furnace in iron pipes, and a large tank holding 10,000 gallons acts as reservoir to draw from, and the property otherwise is well watered.

Labor.—Labor in this section is both white and black, and wages rule much lower than in Pennsylvania and other iron-producing States, and pig iron can now be made

supply of coal, there are all the elements of the economical manufacture of iron.

The iron product from this ore is especially adapted for the manufacture of car wheels, and only a shade inferior to the celebrated Salisbury iron of Connecticut.

This property offers unsurpassed inducements to capitalists.

Plat of the property, samples of minerals, as enumerated, pig iron made from the ore, original certificates of assays, and certificates of tests of the iron made by Prof. Thurston, director of Stephens Institute, Hoboken, can be seen on application.

The property will be sold outright, or will be leased on royalty, with a view to purchase. Price and terms made known on application.

LOUIS ZIMMER,
113 Fulton street, New York.

If you are not already a subscriber to the BALTIMORE MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year, or six months for \$1.50.

New Double Cylinder Planer.

The cut on this page presents the new No. 2½ Double Cylinder Extra Heavy Planer, designed and built by the Egan Company, of Cincinnati, Ohio, whose single cylinder machine, of somewhat similar construction, has met with a marked degree of favor among all classes of wood-workers who require a good powerful machine, capable of doing the smoothest kind of work. This machine is double-belted, is very heavily geared, and has all the facilities for doing a large amount of work in the best manner. Its range of adjustment is great. It planes 26 inches in width and 6 inches in thickness. For a complete description we quote the following from the company's new illustrated catalogue:

"Both in the design and workmanship of this machine we claim a new departure in the way of arranging the lower head, the gearing and the pressure bars. These are the vital points that make the double surer, and we claim advantages on them possessed by no other machine yet in the market.

For carriage factories, furniture factories,

this machine, but is arranged in a very novel way, and every roll is very powerfully fed. The pressure bars are on each side of the knife and come very close up, enabling the operator to do the very smoothest work. The loose and tight pulleys are 12x6½ in., and should run 900 revolutions per minute."

For further particulars address the manufacturers, the Egan Company, 228 to 248 W. Front street., Cincinnati, O.

Mineral Resources.

It is doubtful whether a better iron region can be found in the South than that which for forty miles is penetrated by the route of the Anniston & Atlantic railroad. Beginning at Anniston in Calhoun county and running through Talladega county to Goodwater, in Coosa county, every five miles of it would justify a first-class furnace. That which is not immediately on the route would be easily reached by short branch roads. Already a vast furnace is in operation at Jenifer—the old Alabama Furnace, and another very large establishment of the same character is now in full blast at

of it is almost directly on the line of this road, and the most of it is near the same road to be easy of access. We may mention the McKenzie quarry, where it is also claimed that there is a fine quality of lithographic stone.

Then comes the Leak quarry near Cragdale in great quantity and of a good quality. These are not more than four and six miles from the city of Talladega.

Next the Bowie quarry, which has been worked in the past, and is now being opened out still further. And then the Nix quarry which has also been worked to considerable extent. Then the Joe McMillan quarry. Then the vast deposits on the Player place where the Emarhee cuts through the mountain, said to be white, and clouded, and buff. Next the Herd quarry. Then the Dr. Hill quarry, said to be black; and next Dr. Gantt quarry, which has been worked and is said to be the purest white. And this leads into the hills of Coosa county, where there are also great quantities of marble of various descriptions. All these quarries in Talladega county are believed to be inexhaustible; and it is quite certain

Literary Notices.

NIMROD IN THE NORTH; or HUNTING AND FISHING ADVENTURES IN THE ARCTIC REGIONS. By Frederick Schwatka. Cassell & Co., limited, New York, publishers.

The interest that attaches to the Arctic regions will be sure to make this a popular book, not only among those who delight to read of fishing and hunting in a strange land, but to others who will find in it much that is interesting and instructive. Lieut. Schwatka has confined himself almost exclusively to such scenes and adventures as came within his personal knowledge a few years since, in the region north of Hudson's Bay and, more recently, in the interior of Alaska. In addition to this he has, however, described in a general way the life of the sportsman in the polar wastes. From beginning to end it is an exceedingly interesting volume. It is very finely illustrated, and is printed and bound in a manner worthy of the contents.

As a souvenir of the opening of the new Cotton Merchants Exchange in Memphis, Oct. 15, the Milburn Gin & Machine Co., of that city, have sent out a 5-page lithographed card, representing the picking and ginning of cotton, &c.

THE Journal of Fabrics, of New York, has passed into new hands, and promises that it will be a live, vigorous representative of the dry goods and kindred trade.

WE have received from the publishers a copy of No. 1 of a new series of recitations, called "The Eureka Recitations and Readings," compiled and prepared by Mrs. Anna Randall-Diehl. They comprise prose and poetry, serious, humorous, pathetic, comic, temperance and patriotic. Mailed post-paid, on receipt of twelve cents in stamps, by J. S. Ogilvie & Co., 31 Rose street, New York.

THE North Carolina Millstone Company, Parkwood, N. C., have issued an illustrated circular setting forth the merits of the "Moore County Grit," which they claim is the best stone in use for grinding corn meal.

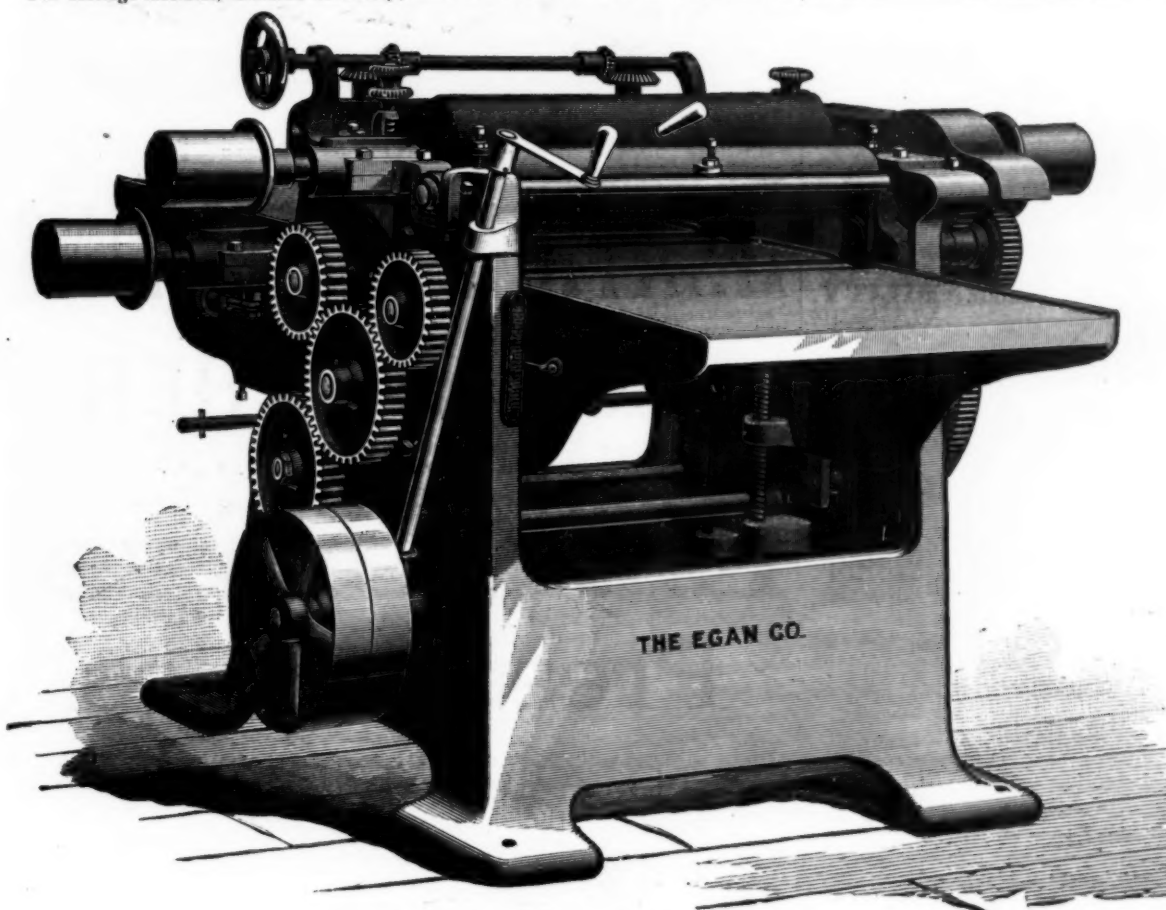
Removal.

Mr. Wm. Minnigerode, dealer in railway supplies and manufacturers' agent, has removed from his former store, Nos. 68 & 70 East Alabama street, and now occupies No. 48 Alabama street on the same square, Atlanta, Ga.

THE American House, Boston, has water-foots in every chamber, and we believe there is not a dark room in the Hotel. That's what travelers want this time of year—fresh air and plenty of running water!

Important.

Passengers arriving in the city of New York via Grand Central Depot, save \$3 carriage hire and transfer of baggage, by stopping at the Grand Union Hotel, opposite said depot. Passengers arriving by West Shore Rail Road, via Weehawken Ferry, by taking the 42d street horse cars at Ferry entrance, reach Grand Union Hotel in ten minutes for 5 cents, and save \$3 carriage hire. Passengers arriving at Pennsylvania Depot, on reaching New York side, can take 6th Avenue Elevated Railroad at Cortlandt Street Station, and reach 42d Street Station, two blocks from Grand Union Hotel, in 20 minutes, for 10 cents, thus saving \$3 carriage hire. 600 elegant rooms, \$1 and upwards per day. European plan. Elevators, restaurant, cafe, lunch and wine rooms supplied with the best. Prices moderate. Families can live better for less money at the Grand Union than at any other strictly first-class hotel in the city. Guests' baggage delivered to and from Grand Central Depot, free.



NO. 2½ DOUBLE CYLINDER EXTRA HEAVY PLANER.

planing mills and workers of hard wood in general, where fine, smooth planing is wanted, we recommend this machine above all others, and for general use—smoothing and planing—it has strength and reliability far surpassing any machine of its weight and price in the country.

The frame is stiff and strong—well designed for great strength and strain, as well as convenience. The bed is dove-tailed into the frame and is gibbed in a very superior manner. The lower head is on the bed, and has an independent adjustment. It can be raised and lowered with the bed, or raised and lowered independently by a crank-handle underneath. The outer end of bed can also be raised and lowered independently, to suit the cut being taken; and the part of the bed outside the head can be swung out of the way, giving free access for setting knives.

The upper main head is of steel and double belted, and runs in large, self-oiling journal boxes, lined with the very best Babbitt.

The feed consists of four powerful geared feed rolls. There are no expansion links on

Ironaton, some six miles South of Jenifer. Below Mardisville, on the Whiting lands, and then next on the Reynolds lands, and on other lands in that region there are vast quantities of ore, and so also further down in the region of the "Player Place," and still further yet as you reach the hills of Coosa county. Most of this ore is the brown hematite.

And within three miles of the same railroad are the almost limitless hills of ore owned by Captain John Oden, where the brown hematite and magnetic ore both abound; all located on the same possessions with his water power on the Shirtee.

The East Tennessee, Virginia and Georgia railroad runs near other fine deposits, as at Talladega and Alpine. And all the ores in the Blue Eye and Eastaboga sections are accessible by the Georgia Pacific railroad.

MARBLE QUARRIES.

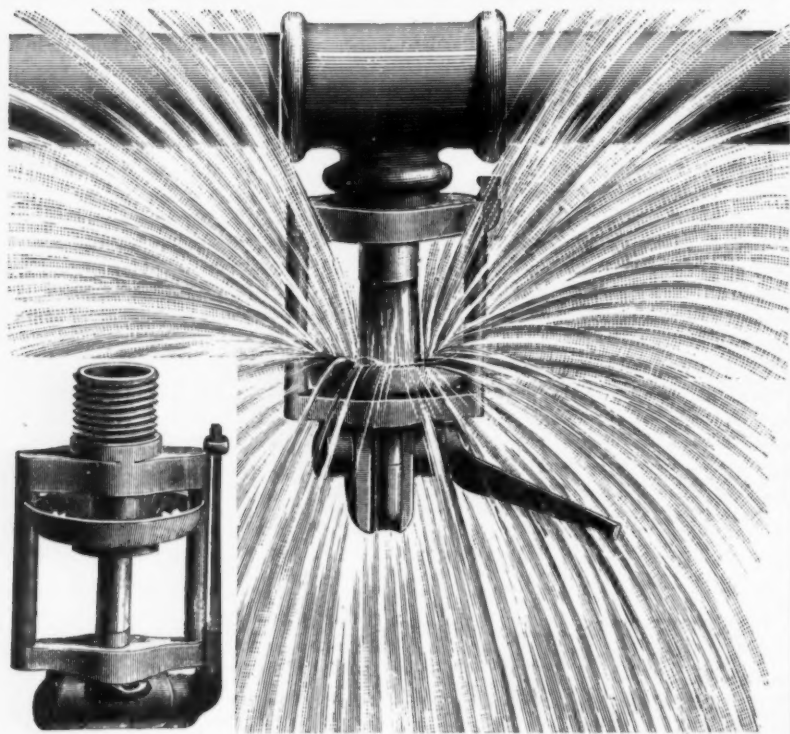
All along the line of the Anniston & Atlantic railroad marble abounds in the greatest abundance. This is a fact well known to all citizens of our country who are informed on the subject. A great deal

that there are many other beds of marble which have not attracted such special attention. Furthermore on the Dr. Hill place there is a great quantity of grindstone which was extensively utilized during the late war. And hydraulic cement is found in at least two places in the county, on the McKenzie place and on the Isaac Stone place. And lime rock of the best quality and in great abundance is found in all parts of the county. And on the Pope place and on the Sherrill place and at other places slate is found and supposed to be good. And on Talladega creek in this county gold mines have been found and developed with encouraging results.

On the Lide place, near Talladega, has been found what is said to be a good quality of red and yellow ochre, which is being developed.—Our Mountain Home, Talladega, Ala.

If you are not already a subscriber to the BALTIMORE MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year or six months for \$1.50.

WALWORTH Strong Sensitive Link Sprinkler.



THE WALWORTH STRONG SENSITIVE LINK SPRINKLER, for the extinguishment of fires, having for its most salient points

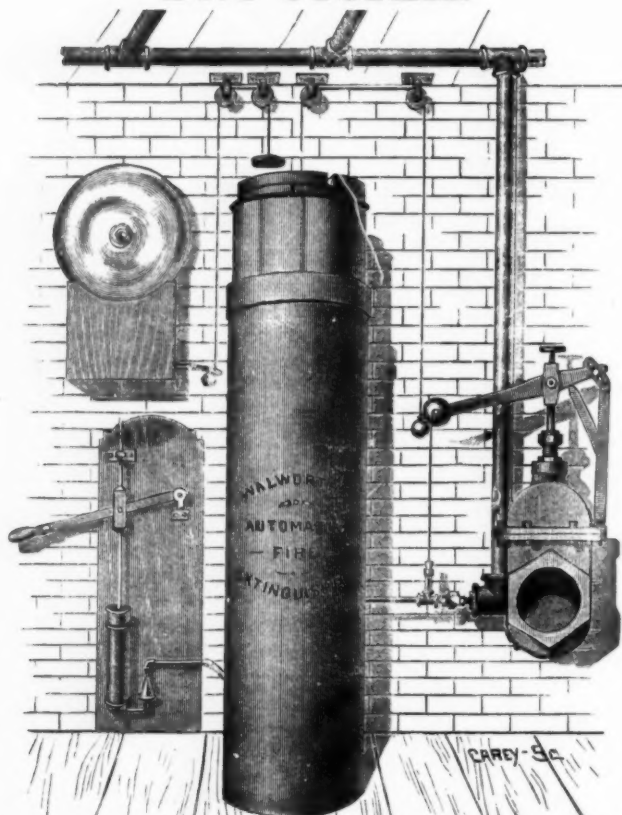
STRENGTH, SIMPLICITY AND RELIABILITY, has forced its way to the front solely because it has been proved to be the best Sprinkler made. No Sprinkler ever introduced has shown such good results. In no instance has it failed to act when needed, notwithstanding the fact that it has been severely tested in many instances.

We give below the account of a remarkable fire:

MESSRS. WALWORTH MANUFACTURING CO.:

GENTLEMEN—On Sunday evening fire was discovered in our engine room, and in five minutes had worked its way through a belt box to the fourth floor. For a few minutes it looked as if the place must go, but the automatic heads on each floor near the fire went off and quickly extinguished it without assistance from hose or anything else. Had there been sprinklers in the engine room, fire could not have got beyond it, and we will be pleased to have you put them in this room at your earliest convenience. After the fire was out we shut the water off at tanks, put on new rings at the eleven heads which had gone off, and with water on started in full next morning as though nothing unusual had taken place.

WALWORTH Automatic FIRE Extinguisher. DRY SYSTEM.



By this system the pipes are filled with compressed air under a pressure of one pound to the square inch. Attached to the pipes is an Alrometer, the inner tank having a weight upon it of 100 pounds. This tank and weight is raised by the compressed air, and as soon as a Sprinkler is opened the pressure, being released, allows the tank and weight to fall, thus opening a valve and either starting the pump or releasing the water from tank or street mains. It is so arranged that an alarm will sound just before the valve is to be opened, notifying that there is a fire, or that more air must be pumped. The entire supply of air can be produced by a few strokes of the air pump. Manufactured by the

Walworth Manufacturing Co.
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—MANUFACTURER OF—

Presses, Dies,

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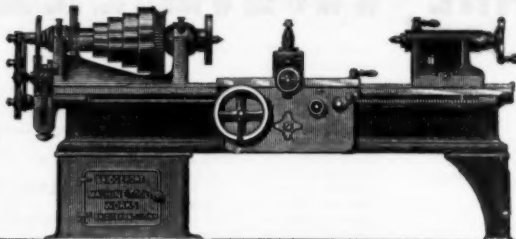
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FOR WORKING SHEET METAL.



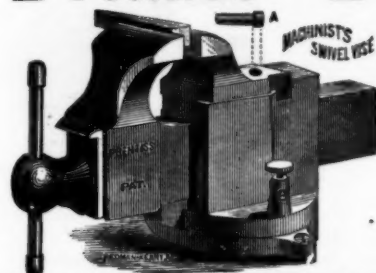
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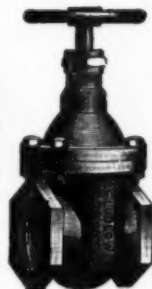
938 to 954 River Street, and 67 to 83 Vail Avenue,

—TROY, N. Y.—



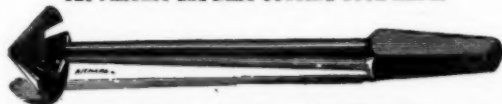
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Double and Single Gate, 1/2 inch to 48 inch—outside and inside—Screws, Indicators, etc., for Gas, Water, Steam, Oil. Send for Circular.



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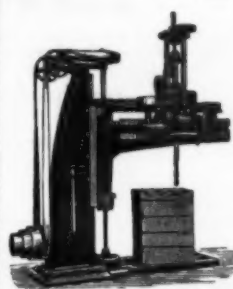
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Were the first parties to design and introduce the BALL and SOCKET HANGERS, ADJUSTABLE COUPLINGS, and the system of selling Shafts, Pulleys and Couplings by the piece. Will be pleased at any time to give estimates for work in place, in mills, or at our works.

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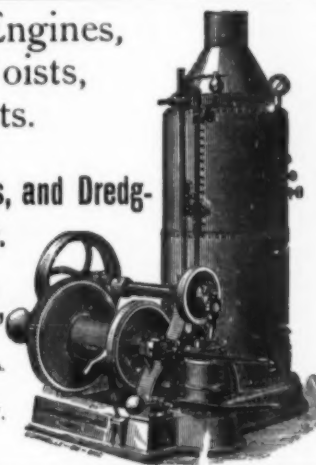
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References: { Croton Magnetic Iron Mines, Brewster's, N. Y.
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Sea Island Chemical Co., Beaufort, S. C.

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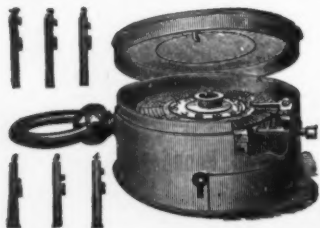


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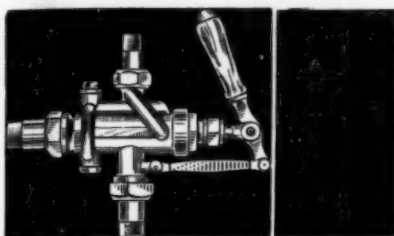
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No. 0 1 1/2 3 5 6 Hog (dis 70
\$10 \$12 \$14 \$16 \$18 \$20 \$22 \$24 \$26 \$28 \$30 \$32 \$34 \$36 \$38 \$40 \$42 \$44 \$46 \$48 \$50 \$52 \$54 \$56 \$58 \$60 \$62 \$64 \$66 \$68 \$70 \$72 \$74 \$76 \$78 \$80 \$82 \$84 \$86 \$88 \$90 \$92 \$94 \$96 \$98 \$100 \$102 \$104 \$106 \$108 \$110 \$112 \$114 \$116 \$118 \$120 \$122 \$124 \$126 \$128 \$130 \$132 \$134 \$136 \$138 \$140 \$142 \$144 \$146 \$148 \$150 \$152 \$154 \$156 \$158 \$160 \$162 \$164 \$166 \$168 \$170 \$172 \$174 \$176 \$178 \$180 \$182 \$184 \$186 \$188 \$190 \$192 \$194 \$196 \$198 \$200 \$202 \$204 \$206 \$208 \$210 \$212 \$214 \$216 \$218 \$220 \$222 \$224 \$226 \$228 \$230 \$232 \$234 \$236 \$238 \$240 \$242 \$244 \$246 \$248 \$250 \$252 \$254 \$256 \$258 \$260 \$262 \$264 \$266 \$268 \$270 \$272 \$274 \$276 \$278 \$280 \$282 \$284 \$286 \$288 \$290 \$292 \$294 \$296 \$298 \$300 \$302 \$304 \$306 \$308 \$310 \$312 \$314 \$316 \$318 \$320 \$322 \$324 \$326 \$328 \$330 \$332 \$334 \$336 \$338 \$340 \$342 \$344 \$346 \$348 \$350 \$352 \$354 \$356 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LAWN MOWERS.		Enterprise Mfg. Co.	dis 30	Wallace's Steel Silver Plated.	dis 33 1/2 to 4	Boss.	per doz \$9.50
Acme Hickey, Easy & Excelsior, new list, dis 40 & 10		Monarch.	dis 40	Rogers Iron 1847.	dis 50	Rat, "Decoy".	per doz \$10.00, dis 10
LINES.				C. Rogers & Son.	dis 40, 10 & 5	Delusion Mouse, per doz.	\$1.50
Linen Fish.				SILVER PLATED HOLLOW WARE.		TROWELS.	
Wire Clothes, Galvanized, 100 feet.				Wm. Rogers Manf. Co.		Lothrop's Brick and Plastering.	
Cabinet, Eagle.				Meriden Britannia Co.		Reed's Brick and Plastering.	
Cabinet, Gaylord.				SOLDERING IRONS AND COPPERS.		Disston's Brick and Plastering.	
Cabinet, Bridgeport.				Covert's Soldering Irons.		Clement & Maynard's.	
Cabinet, P. & F. Corbin.				Covert's Adjustable Coppers.		Worrall's Brick.	
Trunk, new list, Jan 1, 1881.				SPOONS.		Brad's.	
Yale Lock Co., Flat Key.				Britannia.		Garlen.	
Plate.				Tinned, Iron, Table and Tea.		TRUCKS (WAREHOUSE, &c.)	
DOOR LOCKS, ETC.				Tinned Iron Hasting.		Handy Truck.	
Bradford.				German Silver.		Penfield Block Co.'s list, 1882.	
Norwalk.				STONE.		Peerless, with Co. 8, No. 3.	
P. & F. Corbin.				Hindustan No. 1, 5c; Axe, 8c.		Peerless, with Cogs, No. 4.	
Russell & Erwin.				Sand Stone.		Eureka, No. 2.	
Mallory, Wheeler & Co.				Nickel Plated.		VISES.	
Padlocks—Russell & Erwin.				Washita Stone, Slips.		Cheney's Combined Vise and Anvil.	
Norwich Lock Manf. Co.				Arkansas.		Solid Box—Wilson's.	
Wm. Wilcox & Co.				SQUARES.		Trenton.	
Wm. Wilcox & Co.'s Plate Locks.				Steel.		Iron City Tool Works.	
Yale Lock Manf. Co.'s "Standard".				Iron.		Beach—Wilson's.	
Romer's.				Nickel Plated.		Trenton.	
Conestoga.				Try Square and T Bevels.		Parker's.	
Scandinavian, "Norwich".				Disston's Try Square and T Bevels.		Prentiss.	
MALLET.				TACKS, BRADS, &c.		Well Wheels.	
Penfield Block Co., Apple, Hickory and				American Iron Carpet Tacks, all kinds.		WIRE.	
Lignumvite.				Steel Carpet Tacks, all kinds.		Brass and Copper, list of Jan. 17, 1884.	
MEAT CUTTERS.				Swedes Iron Carpet Tacks, all kinds.		Bright and Annealed.	
Dixon's (P. S. & W.) Nos. 1 2 3 4.				Swedes Iron Upholsterers' Tacks.		Bright and Annealed.	
Perry's, Nos. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100.				Tinned Swedes Iron Tacks.		Coppered.	
Woodruff's (P. S. & W.) Nos. 100 150.				Tinned Swedes Iron Upholsterers' Tacks.		Galvanized, Nos. 0 to 18.	
Hales' Nos. 11 12 13.				American Iron Cut Tacks.		Tinned, Nos. 0 to 18.	
Kieser's No. 55.				Gimp and Lace Tacks.		Tinned Broom Wire, Nos. 18 to 25.	
Kieser's Gem.				Copper Tacks.		Annealed Fence, Nos. 8 & 9.	
Kieser's No. 82.				Copper Finishing and Trunk Nails.		Annealed Grape, Nos. 10 to 14.	
Kieser's Monarch.				Cigar Box Nails.		Fence Staples, Galvanized.	
Beef Shaver, (Enterprise Manf. Co.)				Zinc Glaziers' Points.		Japanned Barb Fence.	
MULASSIS GATES.				Common and Patent Brads.		Galvanized Barb Fence.	
Stebbins Patterns.				Hungarian Nails and Miners' Tacks.		Buck Thorne Galvanized.	
Stebbins Genuine.				Trunk and Clout Nails.		Picture Wire.	
Stebbins Tinned Ends.				Tinned Trunk and Clout Nails.		Clothes Line Wire, Galvanized.	
Chase's Hard Metal.				Basket Nails.		Wire Cloth, green, drab and black.	
Self-Measuring, (Enterprise).				Chair Nails.		WRENCHES.	
Lincoln's Pattern.				Tinned Capped Trunk Nails.		American Adjustable.	
Weed's.				Looking-glass Tacks.		Baxter's Adjustable "S." list Jan. 1880.	
Boss Nos. 1 2 3 4.				Picture Frame Points.		Baxter's Diagonal.	
Boss, Japanned Finish.				Leathered Carpet Tacks.		Co's Genuine.	
Boss, Bronze Finish.				Brush Tacks.		Co's "Mechanics".	
NUTS AND WASHERS.				TAP BORERS.		Co's Pattern, Malleable.	
Square Nuts.				Common and Ring.		Co's Pattern, Wrought.	
Hexagon Nuts.				Ives' Tap Borer.		Girard Standard.	
Washers.				Enterprise Mfg. Co.		Girard Agl.	
Zinc and Tin.				Wood Bottom.		Always Ready.	
Brass and Copper.				All Iron.		WRINGERS.	
Malleable (Hammer's).				Wilson's.		Universal, XX, No. 2 1/2.	
PINKING IRONS.				THERMOMETERS.		Universal, XX, No. 2.	
Per dozen.				Tin Case.		Universal, XX, No. 1 1/2.	
ASTOR PLAITING MACHINES.				Storm Glasses.		Universal, XX, No. 1.	
Crown Plaiting Machine.				Winsted.		Universal, XX, No. 8.	
6 in., 8 in., 10 in., 12 in.				Game, Newhouse.		Universal, XX, No. 8.	
Bench, First Quality.				Game, Blake's Patent.		Universal, XX, No. 12.	
Bench, Second Quality.				Mouse, Wood, Choker.		Universal, XX, No. 18.	
Molding.				Mouse, Round Wire.		Universal, XX, No. 22.	
Bailey's (Stanley R. & L. Co.) New list, Jan. 1879.				Mouse, Wire.		Peerless, no Cogs, No. 1.	
The Stanley (S. R. & L. Co.) new list, January 1879.				Mouse, Wire.		Peerless, with Cogs, No. 1 1/2.	
Bailey's.				Mouse, Wire.		Peerless, with Cogs, No. 2.	
Plane Irons, Butcher's.				Mouse, Wire.		MISCELLANEOUS.	
Plane Irons, Auburn Tool Co.				Mouse, Wire.		"Diamond" Vegetable Grater.	
Plane Iron, Ohio Tool Co.				Mouse, Wire.		Rotary Knife Potato Parer.	
Plane Irons, Sandusky Tool Co.				Mouse, Wire.		Metallic Shingles.	
FLIERS AND NIPPERS.				Mouse, Wire.		Hopper Cherry Seeders.	
Button's Patent.				Mouse, Wire.			
Hall's Pat. Compound Lever Cutting Nippers.				Mouse, Wire.			
No. 8, 5 in. \$13.50; No. 4, 7 in. \$21.				Mouse, Wire.			
Gas Pliers.				Mouse, Wire.			
PLUMBS AND LEVELS.				Mouse, Wire.			
Disston's.				Mouse, Wire.			
Stanley R. & L. Co.'s Pat. Adjustable.				Mouse, Wire.			
Stanley R. & L. Co.'s Non-Adjustable.				Mouse, Wire.			
Chapin's Patent Adjustable.				Mouse, Wire.			
Chapin's Non-adjustable.				Mouse, Wire.			
Standard Rule Co.'s New Adjustable.				Mouse, Wire.			
Standard Rule Co.'s Non-Adjustable.				Mouse, Wire.			
Pocket Levels.				Mouse, Wire.			
RAIL.				Mouse, Wire.			
Sliding Door, Wrought Brass.				Mouse, Wire.			
Sliding Door, Bronzed Wrt. Iron.				Mouse, Wire.			
Sliding Door, Iron, Painted.				Mouse, Wire.			
Barn Door.				Mouse, Wire.			
Per 100 feet.				Mouse, Wire.			
B. D. for N. E. Hangers.				Mouse, Wire.			
Per 100 feet.				Mouse, Wire.			
RIVETS.				Mouse, Wire.			
Iron and Tinned, new list, Dec. 10, 1881.				Mouse, Wire.			
In bulk, new list, Dec. 10, 1881.				Mouse, Wire.			
Copper Rivets and Burrs.				Mouse, Wire.			
Nos. 7 8 9 10 11 12 13 14 15.				Mouse, Wire.			
HIVET SETS.				Mouse, Wire.			
Stair, Brass.				Mouse, Wire.			
Stair, Black Walnut.				Mouse, Wire.			
RULES.				Mouse, Wire.			
Boxwood.				Mouse, Wire.			
Ivory.				Mouse, Wire.			
Standard.				Mouse, Wire.			
Stanley.				Mouse, Wire.			
Stevens & Co.				Mouse, Wire.			
Stevens & Co. Miscellaneous.				Mouse, Wire.			
SAD IRONS.				Mouse, Wire.			
Self-Heating, Charcoal.				Mouse, Wire.			
Mrs. Pot's Irons.				Mouse, Wire.			
Enterprise Star Irons, new list, July 30, '82.				Mouse, Wire.			
Comb'd Fluter and Sad Iron.				Mouse, Wire.			
Common Sad Irons.				Mouse, Wire.			
SAND PAPER.				Mouse, Wire.			
Baeder & Adamson's Flint, 000 1/2.				Mouse, Wire.			
Baeder & Adamson's Flint, 2 1/2.				Mouse, Wire.			
Baeder & Adamson's Flint, Assort'd 4 1/2.				Mouse, Wire.			
Baeder & Adamson's Star.				Mouse, Wire.			
Baeder & Adamson's Emery.				Mouse, Wire.			
J. Bartle's Sand, Flint and Emery Paper.				Mouse, Wire.			
SASH CORN.				Mouse, Wire.			
Common.				Mouse, Wire.			
Patent.				Mouse, Wire.			
Silver Braided Lake Hemp.				Mouse, Wire.			
Silver Braid, Lake White Cotton.				Mouse, Wire.			
Silver Braided Lake Drab Cotton.				Mouse, Wire.			
Silver Lake Cable Laid, Bengall Unbleached Hemp, 17 cts.				Mouse, Wire.			
Russian Hemp, 10 cts.				Mouse, Wire.			
Italian Hemp, 34 cts.				Mouse, Wire.			
Samson Braided, white cotton.				Mouse, Wire.			
" "							



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For Sale

- 1 50 Horse-Power Engine and Boiler, with Fittings.
 - 3 Spoke Lathes (made by Gleason, Philadelphia.)
 - About 40 Pulleys.
 - 80 feet Shafting and Couplings for same.
 - Saw Arbors, Boxes, a Facer, Tenoner and Throating Machine for the manufacture of Spokes.
 - 1 (new) 25 horse-power engine, boiler and pump; never been used.
- A bargain to any one wishing to buy either as a speculation or for use.

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10 inch Universal Hand Lathe
MANUFACTURED BY
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HARTFORD, CONN.
Special Tools and
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Built by the Day or Contract.
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All the Comforts and Luxuries of a First-Class Hotel are afforded the Traveler. Spacious and Elegant Saloons and Staterooms, furnished with an especial view to comfort. Unsurpassed Cuisine, which is made a specialty with this Line. Elegant service and courteous attention. Steamers leave Baltimore daily except Sundays at 9 P. M.

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J. P. WALTON & CO.
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Business Chances.

For the purpose of making the **MANUFACTURERS' RECORD** a still more valuable medium of communication between its readers North and South, we will publish, **FREE OF CHARGE**, short advertisements, not exceeding 40 words, from those in the South who have good business openings that they wish to bring to public notice, capital wanted for industrial enterprises, etc., etc.; while readers in other sections who desire to engage in manufactures at the South are also invited to use these columns, without cost, either in seeking information regarding the advantages and special claims of different localities, or for asking about good openings for men and money. This department is also free for Southern manufacturers who wish to advertise for mill managers, superintendents, engineers, etc.

In corresponding with any of these advertisers please mention the **Baltimore Manufacturers' Record**.

THE JOB DEPARTMENT of "The New South," Columbus, Miss., is for sale. One or two capable, energetic young job printers, with a few hundred dollars capital, would find this an excellent opportunity to build up a good business. The materials are all new. Columbus is a city of over 5,000 inhabitants; is rapidly growing, and will be a great railroad center within a few years. Address as above.

WANTED—A Foreman for a Furniture Factory. Apply to J. H. Taylor, Greenville, S. C.

WANTED—An active young man of experience in the manufacture of smoking tobacco. Must have \$4,000 to \$5,000, to join a gentleman of equal capital, to establish a manufactory South. Address Jones, care of Walton & Ewin, Nashville, Tenn.

WANTED—To a competent iron fence man having \$2,000 or \$3,000 to invest. We offer a rare chance. Address, Box 102, Chattanooga, Tenn.

BEING interested in quarrying fine Tennessee marble, I would like to correspond with some one having experience in sawing marble and with capital to invest, with a view to erecting a mill in connection with quarry. Address P. O. Box 72, Rogersville, Tenn.

ATLANTA—Wanted party with \$3,000 to \$5,000 to join practical man in starting soap factory in this growing city; one who can sell goods and manage outside business. This is a fine opening. Address L. E. Boswell, Atlanta, Ga.

PARTNER WANTED to take an interest in a profitable manufacturing business in Middle Georgia. To a man with \$5,000 or more seeking investment and employment or investment alone, this is a fine opportunity. Address F. S. C., Macon, Ga.

PARTNER WANTED with \$5,000 to start a stove factory by parties representing over \$20,000 in real estate and having ample experience. A large profit can be made. Will guarantee the investment and 8% per annum. Address Enterprise, Lock Box 27, Warrenton, Va.

WANTED—A position in a sash and blind factory as foreman or master-workman; 12 years' experience; well up in all kinds of wood-working; can give best recommendations. W. T. L., care **MANUFACTURERS' RECORD**.

TO SOAP MANUFACTURERS—The location of a soap manufactory is desired in a live and growing Southern city of 10,000 inhabitants, situated at the junction of two trunk lines of railroad, in the best section of the South, entirely free from malaria or epidemics. To a thoroughly practical man competent to manage the business and able to furnish half the capital required for a respectable establishment, inducements will be offered. Address Oil Mill, care **MANUFACTURERS' RECORD**, Baltimore, Md.

WANTED—A practical bucket maker. To the right sort of a man who has had experience in working cedar and white pine, and can run a shop successfully, a good inducement will be offered. Barker Manufacturing Company, Knoxville, Tenn.

WANTED—By an energetic, live young man a partner with \$10,000 to \$20,000, to engage in the tobacco business in Piedmont, North Carolina. Best of reference given, showing him qualified to handle business. Address Tobacco, care **MANUFACTURERS' RECORD**.

WANTED by a qualified mining engineer a position as superintendent or manager of a mine in the South. Accurate mine surveys made and ventilation attended to. Address Geo. D. Stonestreet, Mining Engineer, Box 337, Birmingham, Ala.

A FIRST-CLASS MOULDER with moderate capital, also a pattern-maker, can secure an interest in a paying business in the South. Business now in fine condition, but without sufficient facilities to do all the work that can be secured. Additional capital needed. Address H. & Co., care **MANUFACTURERS' RECORD**.

A MACHINIST as partner wanted in a foundry and machine shop that is fitted up in first-class manner and is overrun with work. The location is one of the best in the South. The advertiser has not had sufficient experience to conduct the business properly, and wants a first-class practical machinist to go in with him. Address C. O. W., care **MANUFACTURERS' RECORD**.

A YOUNG MAN, engaged in designing and superintending the construction of machinery, wishes to hear of an opportunity in the South to invest \$2,000 to \$3,000 and services. David Eldredge, care of Ed. Wolf, 572 Eighth Avenue, New York City.

FOR SALE—I offer for sale an interest in a well-established Foundry and Machine Business. A good location; a growing business; valuable patents and patterns. Control of the Southern States on a valuable specialty. For particulars address W. J. care **MANUFACTURERS' RECORD**.

I WANT a foreman for a furniture factory. J. H. Taylor, Greenville, S. C.

Get the Best at First.

The Holyoke Machine Company, of Worcester, Massachusetts, advertise in this issue their well-known Hercules Water Wheel. This wheel has many points of merit that strongly commend it to the attention of those who use water power. The most thorough tests have demonstrated its many good qualities. In Holyoke it is the standard water wheel, the aggregate horse power of the Hercules wheels in operation there being greater than that of all other wheels combined. These wheels are very popular in the South as well as in the North, having been in use for many years in a large number of Southern mills. There are four of the Hercules wheels now in operation in the big cotton mills of the Eagle & Phenix Manufacturing Co., Columbus, Ga., and Mr. John Hill, of that company, in writing, Feb. 25, 1885, to the Holyoke Machine Co., said: "Within the past four years I have ordered four 'Hercules' wheels, all of which have given the purchasers entire satisfaction. Three of the wheels are on regular duty in the Eagle & Phenix Mills. The first wheel ordered did so well that a 'Hercules' wheel has been added each time a new wheel was wanted. In the Eagle & Phenix Mills I supervise twenty water wheels of six different styles. The 'Hercules' is by far the most durable and best made wheel in use here, and, in fact, I know of no wheel its equal mechanically. It is all that can be desired in economy of water. In fact, it is a strictly first-class wheel in every way, and the wheel to buy, use and depend upon."

That is a pretty strong letter, but it is only a sample of letters received by the manufacturers of this wheel. Among the recent shipment of wheels have been two—one a 34-inch and one of 60-inch—to a Georgia cotton mill. Two Hercules wheels are being put in at Natick Cotton Mill, and one at the Arctic Mill of B. B. & R. Knight near Providence. This will make eleven wheels furnished to this well-known firm, one of the most prominent in the manufacturing line in New England. Hercules wheels are sold in England, Ireland and Scotland, and on the Continent, a cable order having been received only a few days ago for one to go to France. The manufacturers say: "The Hercules gives the most power for its size and the highest average percentage from full to one-half gate of any wheel ever made." Their advice to all users of water wheels is to "get the best at first." If you are interested in water wheels, if you want a new wheel or a larger wheel, or a better wheel than you are using, write to the Holyoke Machine Co., Worcester, Mass., for catalogue No. 3.

Managers of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the **MANUFACTURERS' RECORD**. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

Factory For Sale or Lease.

The Atlanta Cotton Mill Supply Factory, completely equipped with the latest improved machinery for doing all kinds of wood, iron and foundry work, is for sale or lease. It is especially fitted to turn out all classes of cotton mill supplies, including looms.

This factory is situated in Atlanta, Ga., having a frontage of nearly 400 feet on the W. and A. R. R. Terms easy. Address

AARON HAAS,
36 Alabama St., Atlanta, Ga.

FOR SALE.

All the machinery complete for a first-class Circular SAW MILL, capacity 75 M feet per day. This machinery has not been used more than one year, is of the most improved patterns and in perfect order. Apply to
C. A. CHISOLM,
Charleston, S. C.

ENGINEERS and STEAM USERS
ATTENTION! The celebrated Cyclone Steam Flue Cleaners may be had at the Supply House of **THOS. C. BASSHORE & CO.**, 28 Light Street, Baltimore, Md.

FOR SALE.

A Portable 20 Horse-Power Engine and Saw Mill, with large lot of timber, if desired, within 6 miles of Farmville, and 3 from railroad. Also one 8 Horse-Power Portable Engine, on skids, Horizontal Boiler, Talbot's make. It is now mounted on truck and used for threshing wheat. Address

FARMVILLE MANUFACTURING CO.,
Farmville, Virginia.

FOR SALE.

A Cotton Seed Oil Mill situated in the heart of the cotton region of Texas. The machinery is comparatively new and is in first-class condition. Railroad side track runs to the doors. Any one desiring to invest in this class of property should address—

Jas. H. Simpson Bank, Columbus, Texas.

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Engines, New and Second-Hand,

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One Engine, 1½ H. P., 3x5 Vertical.
One Engine, 5 H. P., 5x6 Vertical on Base.
Two Engines, 8 H. P., 6x8 Vertical.
One Engine, 8 H. P., 6x8 Horizontal.
One Engine, 25 H. P., 10x15 Horizontal Cut-off.
One Engine, 8 H. P., 6x8 and Boiler on Base.
One Engine, 4 H. P., Baxter Engine and Boiler.

Second-Hand Engines.

One Engine, 4 H. P., Horizontal. (In good order.)
One Engine, 12 H. P., Vertical. (In first-class order.)
One 6 H. P. Baxter Engine and Boiler.
One 8 H. P. Baxter Engine and Boiler.
(These Engines are as good as new.)
One 7 H. P. Rotary Engine.

Prices and Full Information given on Application.

Pennsylvania Agricultural Works, York, Pa.

Farquhar's Standard Engines & Saw Mills.
Send for Illustrated Catalogue.

Address **A. B. FARQUHAR, York, Pa.**

Steam Engines.

AUTOMATIC AND
FLAT SLIDE VALVE
Stationary, Portable and
Traction. Cheapest
and best for all purposes.
Simple strong and durable.
As Farquhar's boiler
overlooked, saw mills,
threshing machines and
Agricultural implements
and machinery generally.
Send for Illustrated Catalogue
A. B. Farquhar,
York, Pa.

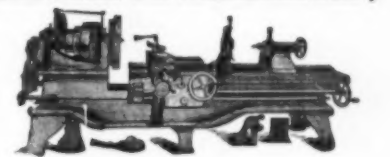


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Iron Planers, Boring Mills, Drills,
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Patent Double Chain Screw Pulley Blocks, unrivalled for durability, safety and power.
Patent Double Chain Quick-Lift Hoists, with Brake for quick and easy lowering.

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W. H. RICKEY, 116 Main St., Cincinnati, Ohio.
Circulars furnished.



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Wood Worker's Catalogue free.
FALLMAN & McFADDEN, Philadelphia, Pa.

COMMON SENSE ENGINES.



Simple, durable, economical, perfect, fully equipped, boilers all wrought iron. Send for Illustrated Catalogue. Agents wanted every where.
From 3 to 10 Horse power. Boiler wrought iron.
Best CORN MILL in the World for plantation and farm purposes.
Stationary Engines from 6 to 100 Horse Power. Portables from 6 to 35 H. P.
COMMON SENSE ENGINE CO.,
Springfield, Ohio.



Bates' Hand Elevators.
Patented April 18, 1871. Reissued July 28, 1876.
OVER 6,000 IN USE.

Adapted for Warehouses, Stores, Factories, Hotels, Public Institutions, and every place where merchandise, &c., is transferred from one story to another.

JAMES BATES, Patentee,
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FORGE**

AND
TOOL WORKS

MANUFACTURERS OF

Bridge & Roofing Bolts

BOLT ENDS,

Wrought and Cast

WASHERS,

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A book of 100 pages. The best book for an advertiser to consult, be he experienced or otherwise. It contains lists of newspapers and estimates of the cost of advertising. The advertiser who wants to spend one dollar, finds in it the information he requires, while for him who will invest one hundred thousand dollars in advertising, a scheme is indicated which will meet his every requirement, or can be made to do so by slight changes easily arrived at by correspondence. 149 editions have been issued. Sent, post-paid, to any address for 10 cents. Write to GEO. F. ROWELL & CO., NEWSPAPER ADVERTISING BUREAU, (10 Spruce St. Printing House Sq.), New York

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Black Lamp, coach painters.....	7 lb 20c
Black Lamp, ordinary.....	7 lb 40c
Black Ivory Drop, fair.....	12@15c
Black Ivory Drop, best.....	30c
Black Paint, in oil.....	kegs, 6c; assorted cans, 9c
Blue Prussian, fair to best.....	30@40c
Blue Prussian, fair to best, in oil.....	35@40c
Blue Chinese, dry.....	70c
Blue Ultramarine.....	15@25c
Brown, Spanish.....	10c
Brown, Van Dyck.....	15c
Green, chrome.....	15c
Green, chrome, in oil.....	9@12@15c
Green, Paris.....	good, 20c; best, 25c
Green, Paris, in oil.....	good, 20c; best, 25c
Iron Paint, bright red.....	7 lb 15c
Iron Paint, brown.....	7 lb 15c
Iron Paint, purple.....	7 lb 3c
Iron Paint, ground in oil, bright red.....	7 lb 55c
Iron Paint, ground in oil, red.....	7 lb 5c
Iron Paint, ground in oil, brown.....	7 lb 45c
Iron Paint, ground in oil, purple.....	7 lb 6c
Linseed Oil, raw.....	48c
Single Boiled.....	50c
Double ".....	52c
Mineral Paints.....	2@4c
Orange Mineral.....	10c
Red Lead, American.....	6 1/2@7c
Red Venetian, (English) dry.....	\$1.50 to \$1.75
Red Venetian, in oil.....	assorted cans, 9c; kegs, 6c
Red Indian, dry.....	10@12c
Rose Pink.....	10@13c
Sienna, American, raw.....	4c
Sienna, burnt.....	4c
Sienna, burnt, in oil.....	8@15c
Sienna, raw.....	8@15c
Umber, burnt.....	4@8c
Umber, burnt, in oil.....	8@15c
Umber, raw.....	3 1/2@7 1/2c
Umber, raw, in oil.....	8@15c
Vermilion, Chinese.....	90c
Vermilion, English.....	60@65c
Vermilion, American, common.....	15c
White Lead, American, pure dry.....	6 1/2@6 3/4c
White Lead, American, pure in oil.....	6 1/2@6 3/4c
White, Paris, English, prime.....	in brls. 1 1/2@2c
Yellow Ochre, French.....	\$1.75
Yellow Ochre, French, in oil.....	ass'd cans, 9c; kegs, 6c
Yellow Ochre, American.....	in brls. 1 1/2@1 3/4c
Yellow Chrome.....	8@18c
Yellow Chrome, in oil.....	9@12@18c
Zinc White, American, No. 1, dry.....	6@7c
Zinc White, American, No. 1, in oil.....	6 1/2@9c
Zinc White, French (Paris) dry.....	5@12c
Zinc White, French in oil.....	10@14c

OILS.

Bleached W. Sperm oil.....	—@1 05
Nat. ".....	95@1 00
B. W. Elephant oil.....	75@
" Whale oil.....	60@ 65
Prime Lard oil.....	53@ 55
Extra No. 1 Lard oil.....	50@
Lubricating oils.....	12@ 25
Miners' oil.....	45@ 50
W. Pressed Fish oil.....	35@
Neatfoot oil.....	55@ 75
Steam-refined Cylinder oil.....	40@ 55
Best Filtered ".....	65@

Signal oil..... 55@ —
Paraffine..... 12@ 20

SUNDRIES.

Benzine.....	7 gal., 8@10c
Turpentine.....	7 gal., 30c
Chalk.....	14c
Chalk, block.....	14c
Dryer patent Am'n.....	ass'd cans, 8c; kegs, 7c
Frostings.....	40c
Glue, white.....	12@35c
Glue, sheet.....	14@20c
Glue, ordinary.....	9@12
Glaiziers' Points, zinc.....	8c
Gum, Copal.....	36c
Gum, Damar.....	25c

Homes without capital. The founding of the town of

WHITTIER.

SOMETHING UNIQUE AND NEW.

Clarke Whittier, of California, is dividing 60,000 acres of land, in Swain co., N. C., in the "Sky land region," into small tracts for actual settlers only.

They will be sold for cash, or on a credit of from one to ten years.

The climate is healthy; mild in winter, and as cool in summer as the mountain regions of the Northern States.

The soil is rich, and produces large crops of all the fruits, grains and vegetables grown in the North, while its tobacco brings the highest prices in the market, averaging a net profit of from \$75 to \$150 per acre, and grass takes naturally to the soil. As far as cleared, it presents fine timber.

The labor required in opening up these lands has made the town of Whittier a necessity, which is now a station on the Western North Carolina railroad, 6 miles east of Charleston. The founder of Whittier will spare no pains or expense to make it the most attractive and desirable resident and business town in Western North Carolina.

Mills, stores, residences and a fine hotel are now being erected, and other manufactories will follow. Water will be supplied to the town by pipes. Lots are donated to churches, schools, public buildings and works.

The improvements of the lands and the town requires all kinds of common labor: purchasers of lands or lots can get immediate and constant employment.

To tobacco raisers I will advance from one-third to one-half the value on their growing crops and wait until sold.

Thus you can buy lands, lots, and build houses, on long credits and work to pay for them.

Such inducements have never been offered before, as are now offered at Whittier.

Come at once and erect your houses. Plenty of work at fair prices. Tobacco lands to clear and get ready for spring crops. Fences, roads and houses to build, nurseries and fruit trees to plant, &c. Plenty of work ready now, and best tobacco land to rent on shares.

C. WHITTIER.

Whittier, Charleston P. O., Swain Co., N. C.

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GEO. A. DELEREE, Vice-President, New York City.

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Contractors and Builders of Gas and Water Works for small cities, Ice Factories and Cold Storage Houses, on the most approved systems now in use. Capital and machinery furnished for any satisfactory manufacturing business. Stock companies organized and their Bonds and Stock put on the market. This company will only invest in enterprises that meet the approval and investment of local capital. We invite correspondence with those who wish to establish Cotton Seed Oil Mills, Cotton Gins, Ice Factories, Brick Machinery on clay beds, Fertilizer Works, &c., &c. We also build houses on the Installment Plan, taking a mortgage on same for 80 per cent. of the purchase price. *No Patents Purchased.* Our business is to develop enterprises needing assistance and experience to meet the demands of trade. For particulars apply to

FRED. BALCOM, General Manager,

No. 234 BROADWAY, NEW YORK.

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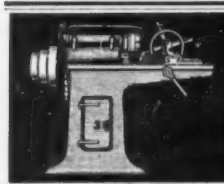
Having a Stock of Repairs for over 12,000 different Stoves, can we not make it to your advantage to trade with us?

PROMPT SHIPMENTS AND SATISFACTION GUARANTEED.

The W. C. Metzner Stove Repair Co.

125 & 127 W. Randolph Street, - CHICAGO.

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ADAMS & PRICE MACHINERY CO.
SOLE MANUFACTURERS OF THE
NEW AND IMPROVED PRINCIPLE
ADAMS PATENT AUTOMATIC
BOLT AND NUT THREADING MACHINES
35 & 41 INDIANA ST. CHICAGO.
SEND FOR ILLUSTRATED & DESCRIPTIVE CATALOGUE.

FOR SALE CHEAP!

40 Horse Power VERTICAL BOILER.

This Boiler was built to order, of very best materials and workmanship; has double-riveted seams; was used but a short time, and is much better than most of the new boilers now made. Cost to build, \$650. For sale at HALF-PRICE, with fixtures, &c. Is a RARE BARGAIN. Ready for immediate delivery. Also, 18-horse HORIZONTAL ENGINE; very strong and heavy.

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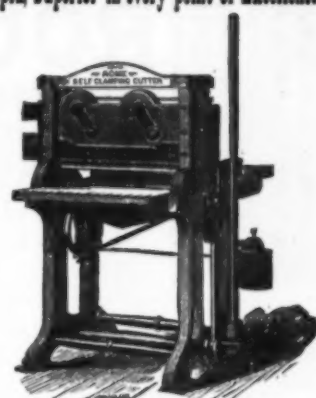
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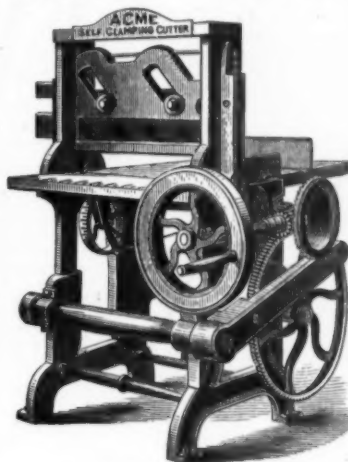
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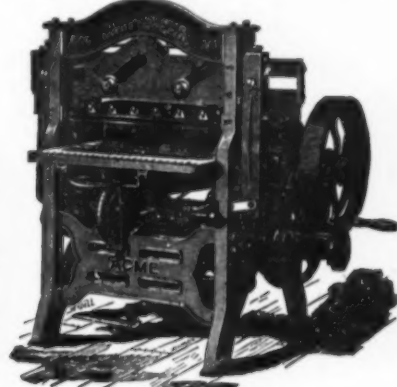
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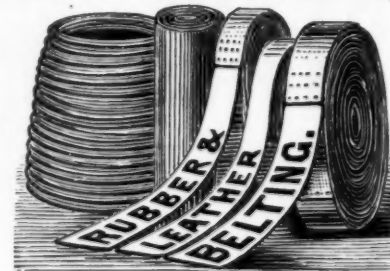
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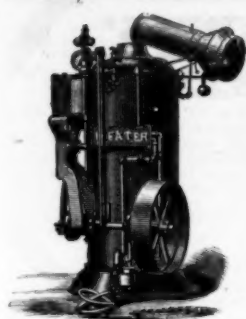
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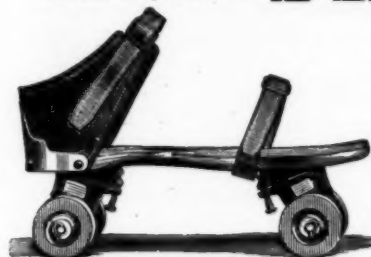
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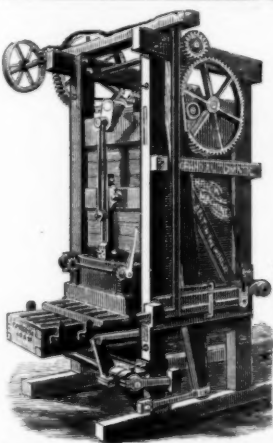


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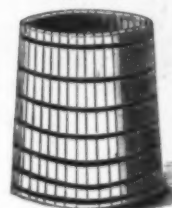
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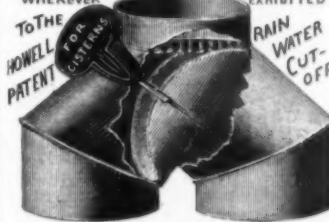
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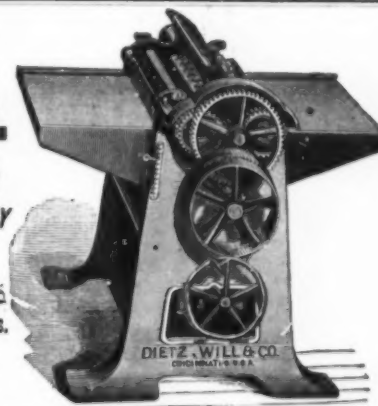
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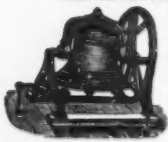
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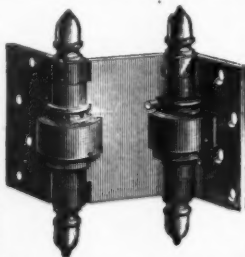
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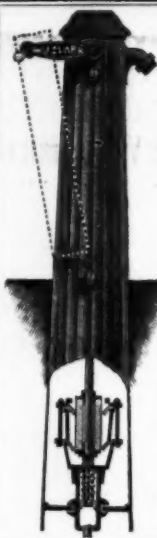
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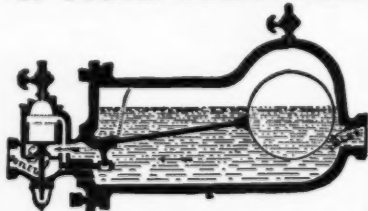
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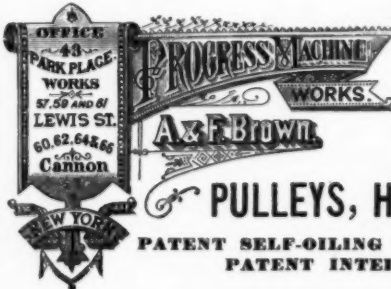
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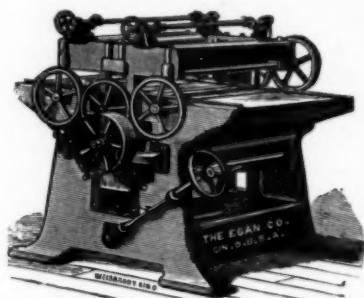
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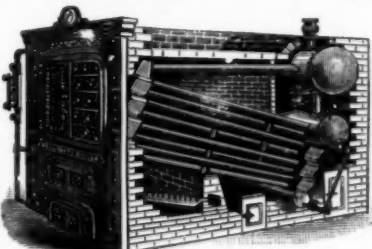
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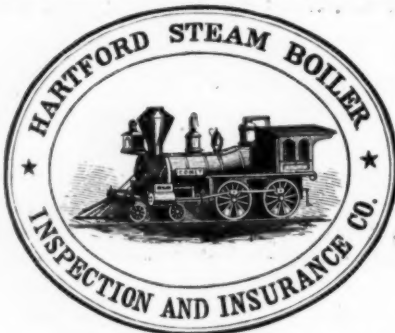
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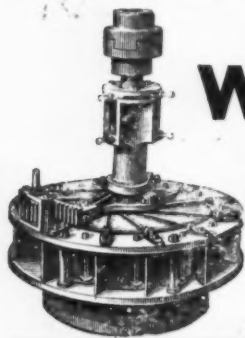
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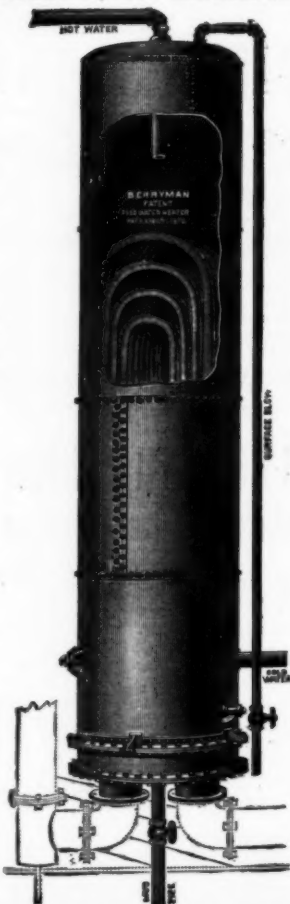
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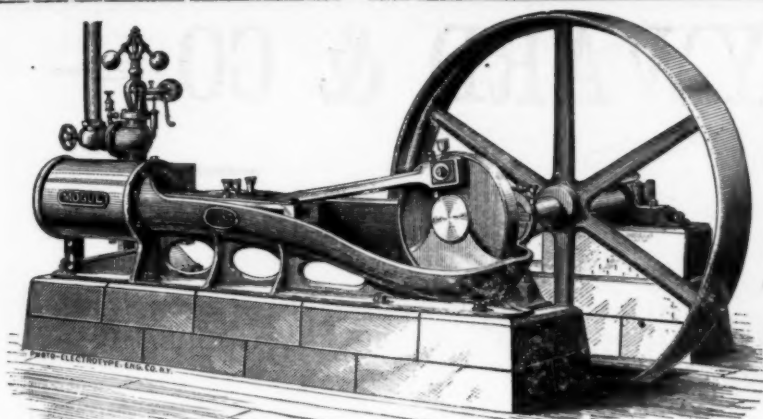
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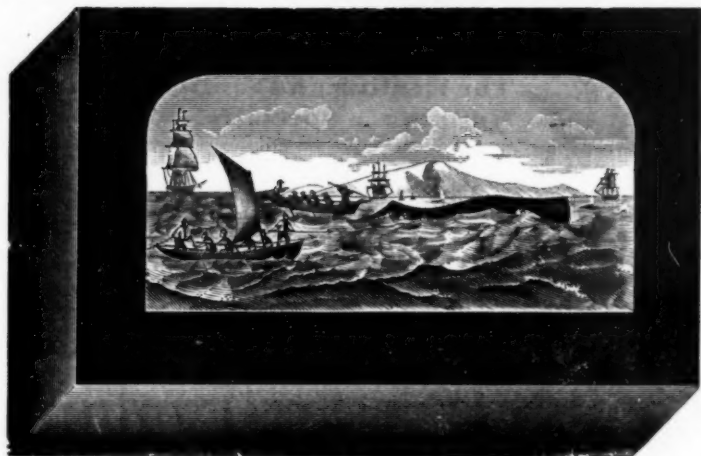
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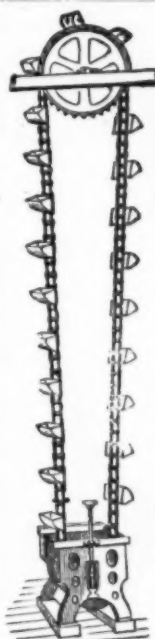
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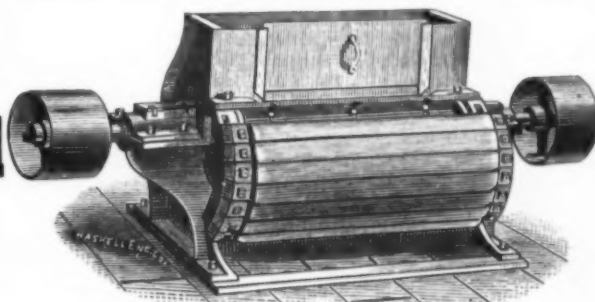
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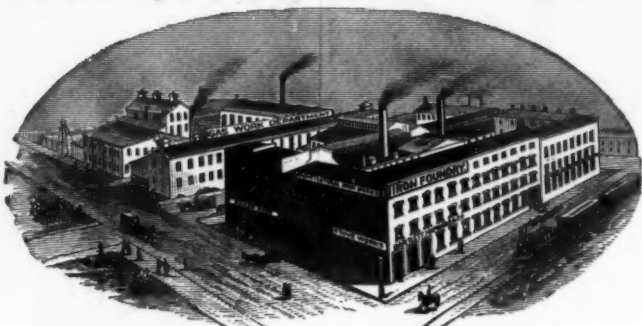
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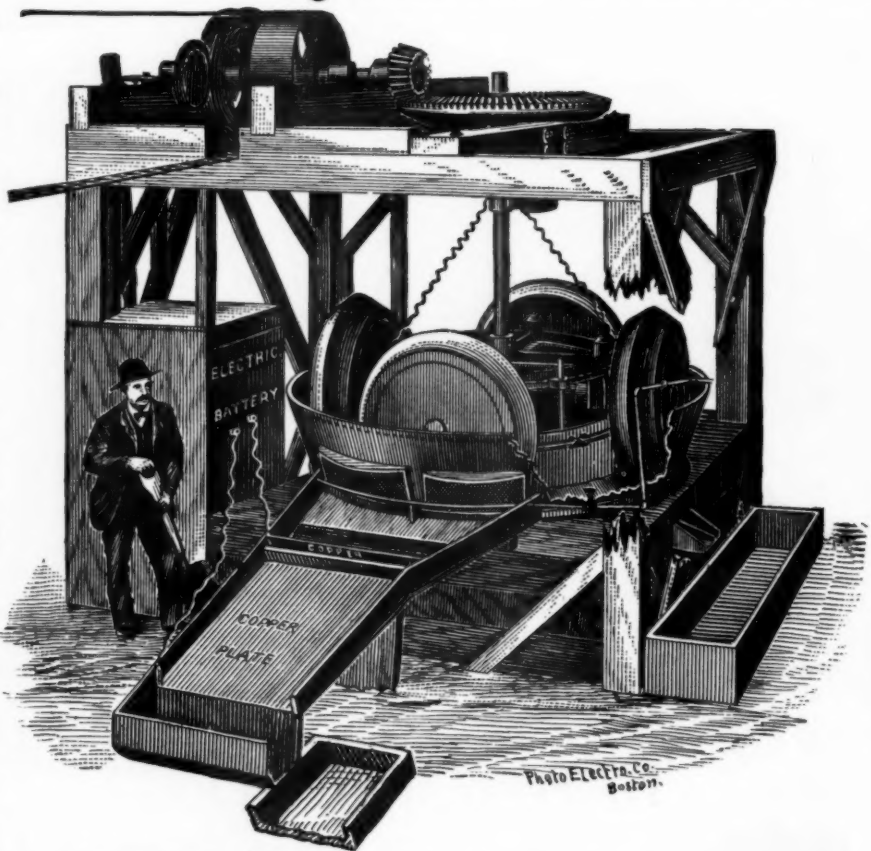
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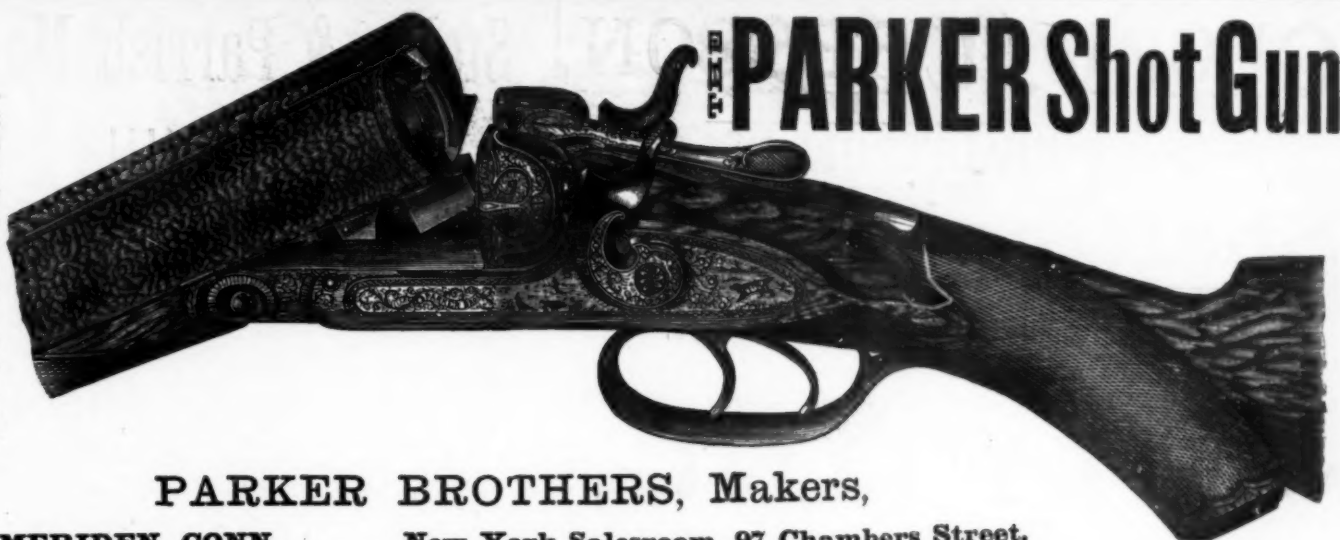
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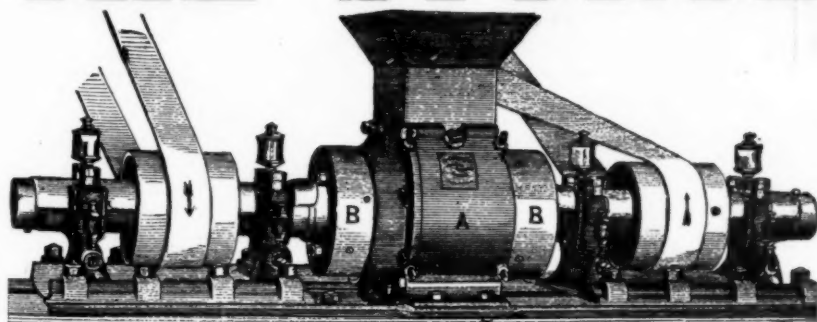
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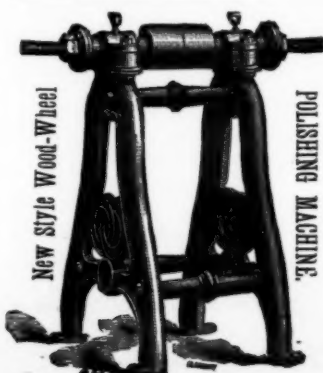
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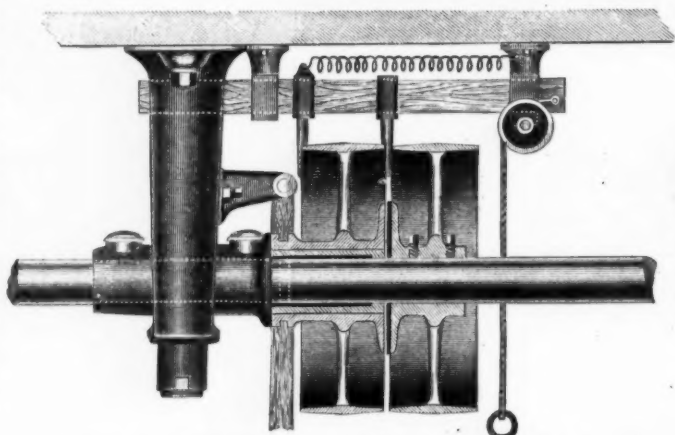
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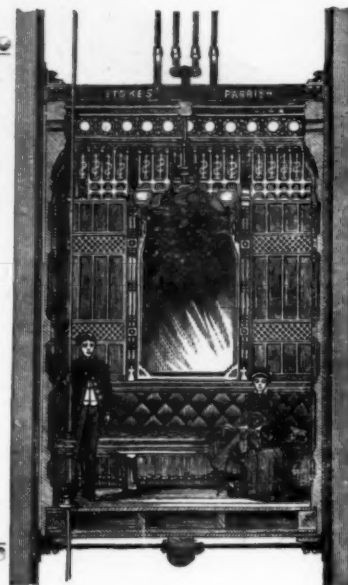
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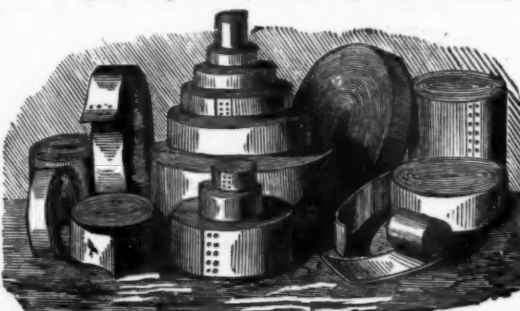
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